

Tests

HEATERS

ESPRESSO MACHINES

COMPACT CAMERAS

WASHING-UP LIQUIDS

CORDLESS PHONES

LASER PRINTERS

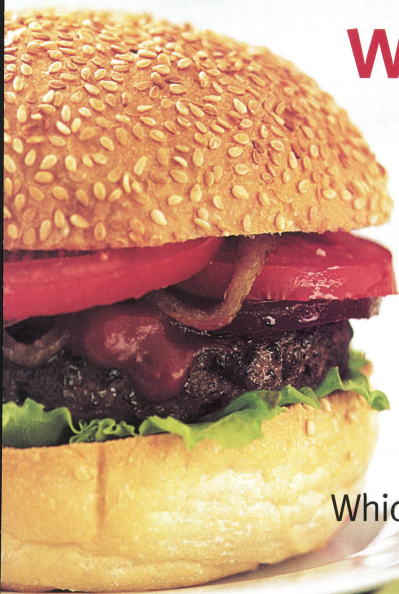
TVs

CHOICE

Independent information for smart consumers

... you want fries
with that?

Why fast food
makes you fat



MOISTURISERS

Which are cheap but good?

HATE YOUR BANK?

Don't suffer, switch

COMING SOON IN CHOICE



BREAKFAST CEREALS COMPARED
'HEALTH' GRILLS
HOUSE & CONTENTS INSURANCE
THE ETHANOL DEBATE
LARGE FRIDGES
PEANUT BUTTER
TYRES



what's new at choice.com.au

search



51 cm televisions

Watch video footage of them being tested. Go to www.choice.com.au/ lifestyle and click on '51 cm TVs'.



Digital cameras

Use our report at www.choice.com.au/computers to make sure you buy the right camera.



Washing machines

'Compare-a-Product' was recently updated to help you pick the best model for your needs. Go to www.choice.com.au and click on 'washing machines' in the Top 10 reports on the home page.

For a limited time, personal CHOICE subscribers can have free access to www.choice.com.au. This offer will end soon, so call (02) 9577 3399 now and have your email address ready.



Jane Mackenzie, Editor

Selling excess

It's fascinating that the only thing you're guaranteed to get more of when you buy a very expensive moisturiser is excessive packaging (see our report on page 15).

You're certainly not guaranteed to get a moisturiser you'll like better — our 300-odd Home Testers found several very cheap ones that they ranked right up the top.

As usual, it's a case of marketing making you think you're getting more for your money when the basic product remains just that — basic.

It's a similar story with fast food (page 8). It's not enough any more for the big chains to sell you a burger with chips: 'upsizing' is now the order of the day, where you pay a little more and end up with a lot more food.

Sounds like a good deal? If you're just thinking of the money, maybe, but how many of us really need more food — particularly more fast food, that's known to be full of fat and calories most of us already have trouble burning off.

A recent study found one example of an upside deal where you got 50% more fat, calories and sugar for 16% more money. On average, 12% more cash buys you around 25% more fat and calories and nearly 40% more sugar. And then there's the "you want fries with that?" phenomenon that incites you to add even more food.

We don't need more fast food any more than we need excessive packaging. The only winners in cases like these are the companies, never the consumer. Don't be fooled, don't increase their profits at your expense — just don't buy it.

Jane Mackenzie
Editor



Call 1300 360 655
and let us shop for
you (see page 50 for details)

CHOICE Shopper is available to personal subscribers only.

CONTENTS

April 2003

COVER STORY

8 ... you want fries with that?

Why fast food is making us fat.

Photo Paula Busata/Stylist Beryl Crowther/Assistant Anne Ballard

REPORT

12 Don't get stuck

If you're fed up with your bank, follow our easy step-by-step guide to switching.

TESTS

15 Moisturisers

You don't need to pay top dollar for a good one.

20 Anyone for cappuccino?

Can a home espresso machine really make decent coffee?

24 Suds 'r' us

Our test finds washing-up liquids that will make the job less of a chore.

27 Film still fine

Compact cameras can still give digital a run for their money.

32 Laser printers

What to buy now they're affordable for the home.

37 Electric convection heaters

New designs and technology are no match for a simple fan-assisted heater.

40 TVs for any room

Not all 51 cm TVs give you good picture and sound quality.

44 Cordless phones

Plenty of features for a good price.

REGULARS

4 Choice Cuts

7 Your Letters

26 Hip Pocket: Airfare surcharge, savvy consumers save \$700,000, too much tax on super.

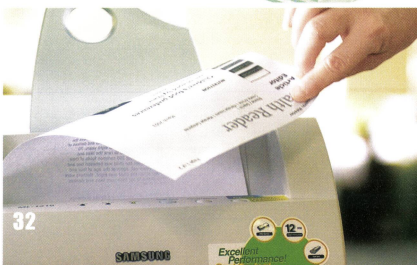
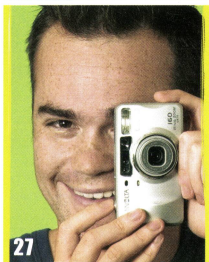
36 Drivelines: More ANCAP test results.

48 Recalls and bans

50 About CHOICE

51 CHOICE 12-month index

52 The Hard Word



Can you help?

BUYING A NEW CAR

If you're in the market for a **new** car, you want as much information as possible on the model you're interested in. How will it behave in different road situations? Do the features work well, and what's it like for space and noise?

Our reader car reviews try to answer these questions, and we need your help again for the next round of reviews.

If you've bought (**new, not secondhand**) one of the models on the right within the last 12 months or so (unless otherwise stated),

please let us know by April 11, 2003:

- Write to CHOICE, Car reviews, 57 Carrington Road, Marrickville 2204.
- Fax to CHOICE, Car reviews, (02) 9577 3377.
- Email to car-review@choice.com.au.

Please tell us which of the models you can review for us, when you bought it, and your fax number, email or mailing address.

- Ford Laser.
- Holden Zafira.
- Honda CR-V.
- Kia Carnival.
- Mitsubishi Lancer (from 07/02).

Improved memory? Forget it

A popular herbal supplement, ginkgo biloba, promoted as a 'memory-enhancing agent', has failed to live up to its claim. According to the March Issue of CHOICE *Health Reader*, if you're over 60 and still of sharp mind, you're unlikely to benefit much from taking ginkgo to boost your memory.

Manufacturers generally claim that ginkgo benefits anyone within four weeks of continuous use. Previous studies have shown a small memory benefit, but only using one of several available tests. An effect has also been shown in people already suffering impairment such as Alzheimer's disease.

In a 'double blind' study (where neither the participants nor the researchers knew until the end of the trial who was taking ginkgo or a placebo), 220 mentally and physically healthy people aged over 60 either took ginkgo for six weeks at the manufacturer's recommended dose (120 mg per day) or a placebo.

After the six-week trial, the researchers measured aspects of the participants' learning, memory, attention and concentration in 14 psychological tests, none of which showed a significant improvement in those that had taken ginkgo. So for the majority of the population, it's unlikely to be of any benefit.

Customer service or rip-off?

When Lesley Kirby, of Caringbah, NSW, received a letter from the company that had sold her a safety switch (residual current device) some time earlier, alarm bells started to ring. It was a notification that 'Jeff' would be in her area on a certain day to inspect and test her safety switch, so that it would pass the tests for an extended two-year warranty. Payment for the service was \$69, preferably cash on delivery.

The company had called Mrs Kirby earlier and advised her the switch would need updating. "I thought it didn't sound right," she said. So she phoned and declined the offer, but the rep turned up anyway, ready to check and collect. Mrs Kirby again declined the service and sent the surprised Jeff away. She told her neighbour (who had also bought a switch) about it too and, sure enough, she received the same service 'offer' a few days later. "She's elderly and would otherwise have spent that money," Mrs Kirby said.

The letter said safety switches slow down over time if they aren't activated — which is possible. But checking if the switch is still working properly is a job you can easily do yourself — you just press a button.



Fire danger

The March issue of CHOICE *Health Reader* also reports that most campfire burns in children aren't caused by accidents while the fire is burning, but as a consequence of putting it out with sand rather than water. The next morning kids playing on the sand are burned by the hot embers underneath.

Researchers recently found that the heat of a campfire that had burned at more than 510°C had dropped to 47°C 10 minutes after extinguishing it with water. But the temperature of a second fire, extinguished with sand, had only dropped to 267°C after 10 minutes, although it was no longer smoking or smouldering. Even eight hours later it was still 91°C — enough to cause a full-thickness burn of the skin in one second. So, put out campfires with water, not sand.

If you'd like to subscribe to CHOICE *Health Reader*, call 1800 069 552 or go to www.choice.com.au.



Test it on during the day on a work day, when you can get an electrician if there's a problem. Press the button, and if it doesn't work straightaway, press it again a few times — sometimes dirt, cobwebs or the like can clog up the mechanism. If it still doesn't work, get an electrician to check it.

And after checking the switch, remember to reset any electronic clocks in your household.

STOP PRESS

RECALL OF ALL WATER-BASED TRIFORINE GARDEN SPRAYS

Following an investigation sparked by the findings of our test of garden sprays (CHOICE, December 2002), the Australian Pesticides and Veterinary Medicines Authority (formerly the National Registration Authority), the government body responsible for the certification of agricultural chemicals, has cancelled the registration of all water-based triforine garden sprays.

All product on the market has to be recalled by manufacturers, and consumers are entitled to a refund if they've purchased one of these products.

Triforine is a fungicide that's been used in a number of popular domestic garden sprays. Our test confirmed that the chemical is unstable in a water-based solution, and that products containing it therefore don't meet their labelled and certified concentrations.

Antivirus software

With almost one in every 200 emails worldwide containing a virus, it's essential to practise good computer hygiene. So installing effective antivirus software is vital.

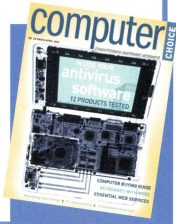
Computer CHOICE evaluated 12 antivirus programs for its March/April 2003 issue, looking for products providing hassle-free but comprehensive protection.

Based on viral detection rates, most free or cheap software these days performs equally as well as the more expensive brand-name packages. Differences between products showed up in the usefulness of help files, ease of changing settings and scheduling options, as well as usefulness of the default settings.

As the saying goes, the price of freedom is eternal vigilance — applied to antivirus software, this means your software is only as good as its last update. So a critical function of antivirus software is updating virus definitions — a process which should be as simple as possible. The most convenient packages automatically check for updates as a default when you go online: **NORMAN Virus Control 5**, **NORTON Antivirus 2003** and **McAfee VirusScan Home Edition 7.0**. But some products aren't so simple: **NOD32**, for example, requires you to input information — hardly hassle-free.

Overall, **NORTON Antivirus 2003** was judged the best. It was the only product that didn't require at least one setting to be altered to provide maximum possible protection straight out of the box. Close second was **PC-cillin 2003**, which handled most problems with ease and came with a handy wizard to change settings. All the other products required too much day-to-day fiddling to be recommended for hassle-free virus protection.

The March/April issue of *Computer CHOICE* also features a keyboard trial and a computer buying guide. To subscribe, call 1800 069 552, see page 49 or go to www.choice.com.au.

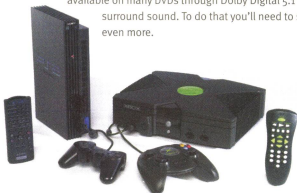


UPDATE

GAMES CONSOLES AS DVD PLAYERS

In December 2002 we tested the **MICROSOFT Xbox** and **SONY PlayStation 2** as DVD players. We also bought a DVD kit (including a remote control) for each console at an extra cost of around \$50 each, but unfortunately neither of these kits lets you make use of the better sound quality

available on many DVDs through Dolby Digital 5.1 or DTS surround sound. To do that you'll need to spend even more.



The **PlayStation 2** has a built-in optical cable connection (though no cable is supplied) and can transfer Dolby Digital 5.1 or DTS sound to a home theatre receiver, where it's split into the separate channels that make up surround sound.

The **Xbox** requires an additional Xbox Advanced AV pack costing \$39.95 to provide surround sound, and it doesn't include the cable either. An optical cable will cost an extra \$20 to \$70, depending on its quality. A \$40 cable should be sufficient for most mid to low-priced home theatre systems.

The Xbox Advanced AV pack has an S-video connection and an S-video cable. To get S-video on the **PlayStation 2** you need to buy an S-video adaptor cable, which will set you back \$44.95.

In either case, the extra \$80-plus you have to spend to give them similar functionality to the other DVDs in the test puts them at the more expensive end of models we tested.

EMERGENCY: DIAL 000, DON'T SMS

The Australian Communications Authority has reissued a warning not to rely on the short message service (SMS) in an emergency. The authority has become aware that some security and fire alarm products have come onto the market that use SMS messages to report security breaches or fire alarms.

The concern is that because SMS is a 'store and forward' service, there's no specific time of delivery and no feedback about whether the message gets through successfully. A 'message sent' icon on the phone doesn't necessarily mean the intended recipient, in this case emergency services, has received the message — only that the message has been sent to the SMS centre within the sender's network and is ready for forwarding.

Dialling 000 (or 106 for communications-impaired users) is the only way of ensuring help is on the way, and also allows detailed information regarding the exact location and nature of the emergency to be passed on quickly. GSM mobile phone users can also dial 112 in an emergency.

CORRECTION

FINANCIAL PLANNERS

CHOICE, Jan/Feb 2003

COMMUNITY AND CORPORATE

FINANCIAL SERVICES appeared in our results as 'poor' for failing to provide the client with an Advisory Services Guide (ASG). The client has since found an ASG from the planner. With ASIC, we've therefore revised the results, and **COMMUNITY AND CORPORATE FINANCIAL SERVICES** now scores 70% and is graded 'good'. CHOICE and ASIC sincerely apologise for this.

UPDATE

DIGITAL CAMCORDERS

CHOICE, Jan/Feb 2003

In the table we said that our Best Buy, the **SONY DCR-TRV8E**, doesn't have AV and S-video input connections. This information, while confirmed by Sony before publication, is wrong. The model in fact has both AV and S-video inputs. Our test scores aren't affected by this.

Higher-capacity rechargeables— even better value

When we published the results of our endurance test of rechargeable batteries (CHOICE, June 2002), the three top models (all of them nickel-metal hydride, or NiMH, batteries) had already been replaced by the following higher-capacity models:

- **DIGITOR 170AAHC 53149**, 1700 mAh, about \$8/battery.
- **ENERGIZER NH15BP**, 1700 mAh, about \$6.35/battery.
- **VARTA Accuplus Ultra 5606**, 1400 mAh, about \$9.20/battery.

So we decided to put these new models through the same test program — here are the results.

- We continuously drained and charged four samples of each model 250 times in a medium-drain scenario (similar to using a motorised toy), and recorded the average time they lasted per cycle. We then calculated the running time you get per dollar of their purchase price (based on a set of four batteries plus a charger).

All three models lasted about one quarter to one third longer than their predecessors (depending on the capacity increase). The

new **ENERGIZER** and **VARTA** cost the same as the old models, so they're now much better value for money. The **DIGITOR** is quite a bit more expensive than the **POWERHAUS** model it replaced, giving it similar value for money.

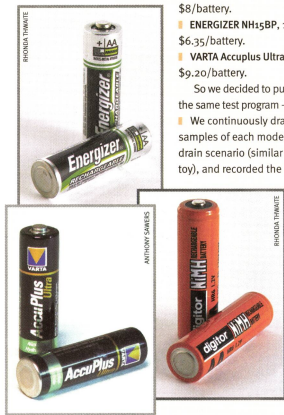
- We looked at the consistency in operating time between the first and 250th cycles. None of the models showed a significant drop — an indication that they're likely to last much longer than 250 cycles.

- We checked how long four samples of each model lasted in three single-cycle standard scenarios: a low-drain personal cassette player (they lasted for 12 to 14 hours), medium-drain motorised toy (4.5 to 5.5 hours) and high-drain camera flash (2.25 to 2.75 hours). In most cases that's at least 50% longer than their predecessors lasted in the same tests, but still about one quarter to one third less than you get from non-rechargeable alkalines.

However, manufacturers keep increasing the capacity of NiMH batteries (for example, there's now a 1600 mAh **VARTA** and a 1850 mAh **ENERGIZER**). So their performance should come even closer to that of alkalines — at even better value for money.

Using rechargeable batteries instead of non-rechargeables not only gives you great value for money, it also helps the environment. Based on our 250-cycle medium-drain scenario, each of the tested models prevents more than 150 alkaline batteries from going to landfill.

NiMH batteries contain the heavy metal nickel. Unlike the toxic cadmium in nickel-cadmium (NiCad) rechargeable batteries, this isn't considered an environmental problem, and it's OK to dispose of NiMH batteries in normal household waste.





Level 3, 56 Pitt Street, Sydney 2000), and the Australian Securities & Investments Commission (ASIC Complaints, PO Box 9149, Traralgon 3844).

www.choice.com.au has comprehensive travel insurance information and an interactive database/calculator that provides details on the most suitable policies for individual requirements. (Go to www.choice.com.au/money and follow the links from there.)

Good service

My husband had a slice of Helga's Bread with Vegemite and discovered a thin dark piece of wire. No damage done, but we thought it prudent to contact both companies.

Kraft told us it would immediately send an envelope for us to return the Vegemite and half the piece of wire.

A representative of Helga's picked up the other half of the wire two days later, turning up with five loaves of bread (still warm).

After five days we still hadn't received the envelope Kraft said it'd send. I contacted Kraft again, and the envelope arrived two days later.

A letter arrived from Helga's 10 days after the incident, explaining it was indeed a problem with their equipment, which they had now rectified. A \$25 Woolworths' voucher was enclosed. What honesty, and what service. We

the USA and financially unable to rush to New Zealand to attend their funerals. If my sisters had lived in Australia, the insurers in both cases would have flown me home, and then back to the USA.

Are you aware of this problem? Do you know what we or anyone can do to try to make the insurance companies acknowledge the globalisation of 21st century families?

Vicky Roch
Via internet

We've urged insurers to remove these unfair restrictions from their policies, but at present only a handful of policies cover relatives living outside Australia — and then only in New Zealand. Restrictions may even apply to relatives in Australia, depending on age or pre-existing medical conditions.

We encourage Vicky and other concerned travellers to voice their concerns by writing to the Insurance Council of Australia (ICA,

THUMBS UP!



Tracey McTeare (a CHOICE staff member)

awards a thumbs-up to the **Electronics Boutique** at Miranda, NSW, whose sales staff dissuaded her from purchasing a graphically violent and racy Playstation 2 game that her 11-year-old nephew was trying to convince her to give him as a present.

Matthew Hammond of Dianella, WA, awards a thumbs-up to **Selleys**, which sent him a replacement for a worn-out Wash Up Wiz when he couldn't find it in shops.

were extremely impressed, to say the least.

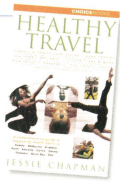
I then contacted Kraft again, and before I could explain what Helga's had told us, I was informed the object had not been investigated yet.

We had no expectations whatsoever, but after the incredible personal attention we received from Helga's we weren't impressed with Kraft at all. We've eaten Helga's bread from its inception and will continue to eat the range without any hesitation.

Good one, Helga's.

Lee Reemst
Happy Valley, SA

It's always worth contacting the manufacturer directly if you find a foreign object in food, as many companies have procedures in place to deal with such incidents. It's also a good idea to retain a portion of the foreign object, if possible, just in case it gets lost in any investigation or the matter isn't dealt with seriously by the company — in which case you may want to report the problem to the Health Department in your state.



LETTER OF THE MONTH

We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. Positive outcomes you've had to a complaint you took to a manufacturer, retailer, importer or tradesperson interest us, too. Address these letters to **Thumbs Up** at the address on page 2.

To thank you for writing to us, **Your Letters** awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, **Vicky Roch**, receives *Healthy Travel*, or any other book of her choice from the catalogue that was mailed with this issue.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.

... you want fries with that?

Or maybe you'd like to 'upsized' your meal and really push the fat, salt and sugar right over the top?

IN A NUTSHELL

- Fast food has to take at least some of the blame for an increasingly fat Australia.
- Healthier choices are the exception rather than the rule at the big chains — but there are some out there.
- Upsizing may be good value for money, but your arteries (and backside) won't thank you for it.

When we started analysing the nutrition info from the fast-food giants, even our hardened food team was shocked by the amount of kilojoules, fat and salt that some options packed. A burger with 67 grams of fat — that's around three-and-a-half tablespoons, even before you add the chips and other possible extras. A serve of crunchy chicken bits that's nearly 2000 kJ? And our kids eat this stuff? No wonder we're evolving into a nation of fatties.

CALORIE-GUZZLING COUCH POTATOES

The PR knives are out for the health experts who've dared to implicate fast food as part of the problem of increasingly fat Australians. Articles abound suggesting it's inactivity that should be blamed — and we're not disagreeing that sitting in front of the telly or computer is a big part of the problem. But fast food's easy availability, relatively low cost and the advertising-driven demand from our kids for fatty, salty, high-calorie fast food have to take some share of the blame.

And the fast-food giants can take more blame still for their deliberate strategy aimed at increasing the amount you spend when you visit by offering meal deals and 'upsizes' where a little more money gets you heaps more food.

UPSIZE — TO THE NEXT TROUSER SIZE

It's a strong person who can resist such great-value deals. In some instances you even get more food for less money by taking a meal deal. For example, the smallest **HUNGRY JACK'S** meal deals include regular-size chips and soft drink, so if you really only want small chips and a small soft drink with your burger it's going to cost you more for less.

A recent study by health researchers at Deakin University in Melbourne found one upsized meal that delivered as much as 50% more fat, calories and sugar for only 16% more money. On average they found 12% more cash buys you around 25% more fat and calories (and nearly 40% more sugar). It may add up to value for money, but your arteries (and backside) won't thank you for it.

And as anyone who's visited one of these meccas of fast cuisine knows, the upselling doesn't stop there — the famous cry of "you want fries/dessert/shake with that" has entered the national lexicon and echoes around our shopping malls and eateries every minute of every day.

So where do you go if the kids are demanding a fast-food fix, but you don't want to blow your diet and your waistline? Here's a look at what the big chains have on offer ... a little good, but mostly bad and some downright ugly.

Fast food profiles

Find out here and from the table on pages 10–11 just what to expect from the fast-food chains' food. We included the largest chains, which are in all or most states.

MCDONALD'S

There's not much on offer for the diet-conscious eater — even the tiniest burger on the menu (the **Junior Burger**) has over 1000 kJ. While you might think the fish or chicken options would be leaner than the heavyweights — **Big Mac**, **Quarter Pounder with Cheese** or **McOz** burgers — don't be taken in. **Filet-o-Fish** still manages three teaspoons of fat despite its small size, and a **McChicken** only has a teaspoon less than a **Big Mac**. And if you're making a full meal of it, it's pretty much chips or chips. If you're vegetarian, don't bother even going in ... there's no veggie option and even the chips and apple pies are fried in beef tallow.



ANTHONY SWEETS



ANTHONY SWEETS

KFC

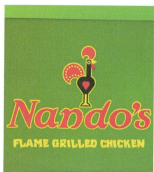
Not too much deserving of an honourable mention here — the Colonel's coating with its secret herbs and spices sure soaks up the fat. The **Original Fillet Burger** is the best of the lot with only 18 grams (three teaspoons) of fat, but even the **Twister** — which sounds healthy with its chicken strips and salad in a tortilla roll — has nearly two teaspoons of fat and over 2500 kJ. Side dishes like potato and gravy or corn aren't loaded with fat, so if you eat them instead of chips it balances things out a bit.

Vegetarians need not apply.

NANDO'S

Though the burgers and flame-grilled chicken here are not always lower in fat and kilojoules than elsewhere, being able to get low-fat side dishes like salad and spicy rice makes getting a healthy balance easier than at the chips-with-everything chains. You can even get a **Chicken Garden Salad** that only has around a teaspoon of fat.

There's also something for vegetarians to get their teeth into — without breaking the fat bank. The **Veggie Burger** and **Veggie Pita** are joined by salads, spicy rice and grilled corn to give vegetarians the best choice of any of the chains.



ANTHONY SWEETS



ANTHONY SWEETS

HUNGRY JACK'S

HUNGRY JACK'S burgers tend to be on the larger side, but that doesn't excuse the fact that a **Whopper** outweighs a **Big Mac** by more than 500 kJ and nearly a tablespoon of fat. And a **Double Beef and Cheese Whopper** almost doesn't bear thinking about: nearly 4200 kJ (1000 Calories) and 67 grams of fat — that's three-and-a-half tablespoons.

At first glance you might applaud the inclusion of a **vegie burger** on the menu — but don't order it just yet. Sure, the patty is chock-full of veggies with plenty of salad, but somehow they manage to squeeze in close to 3000 kJ (nearly 700 Calories) as well as two tablespoons of fat, not to mention close to half the adult upper daily limit for sodium.



ANTHONY SWEETS

RED ROOSTER

The chicken pieces on offer are less fatty than **KFC Original Recipe**, probably because there's no batter-like coating, and if you choose lower-fat side dishes like potato and gravy or peas instead of chips, things look even better. But the real star of the line-up is the **Sub 97** — a low-fat sub roll with barbecue chicken, salad and mayo. This new offering gets the fat way down to only six grams a serve.

However, vegetarians can forget it.

WHAT ABOUT PIZZA?

We're going to take a close look at pizza in another issue, but if you're trying to keep the fat down, toppings without meat are a good choice. To cut the fat and salt further ask for less cheese, rather than more. Our previous tests haven't found much difference between thin or thick crusts (as long as you eat about the same weight of each). Oh, and easy on the garlic bread.

HOW MUCH A DAY?

Here's a rough guide to how much you need each day to maintain your weight:

- **Woman** (18–60, light activity, 60–70 kg, not pregnant): 9000 kJ, 70 g fat, 920–2300 mg sodium.
- **Man** (18–60, light activity, 70–80 kg): 11,500 kJ, 90 g fat, 920–2300 mg sodium.
- **Child** (eight years old): 8000 kJ, 65 g fat, 600–2300 mg sodium.
- **Teenage boy** (16, light activity): 12,500 kJ, 100 g fat, 920–2300 mg sodium.
- **Teenage girl** (16, light activity): 9500 kJ, 75 g fat, 920–2300 mg sodium.

Fast food profiles continued ...



SUBWAY

The **SUBWAY** chain of sandwich shops offers a range of meat and salad rolls. It was handed PR fame when a US uni student, Jared Fogle, went from 425 lb to 190 lb (193 kg to 86 kg) on a diet of coffee for breakfast and a **SUBWAY** sandwich for lunch and dinner. Others have followed where he led and the chain proudly uses him in their advertising (while carefully noting that they don't actually endorse his 'diet').

The reason he succeeded? Portion control — meaning he dramatically cut the amount of food he ate — and he always chose one of the 7 under 6 subs (originally seven subs that had less than 6 g of fat). There are certainly more healthy choices here than the other big chains (and a couple of veggie options), but not everything gets a thumbs-up. You need to choose carefully or you can still blow the bank — some options on the regular menu get close to 2000 kJ and have over a tablespoon of fat in a 15 cm sub.

KEBABS

ALI BABA

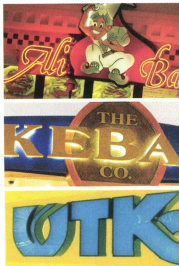
(NSW/ACT, Victoria, one outlet each in WA and Queensland.)

THE KEBAB CO

(WA and one outlet in Victoria.)

UNCLE TONY'S

(Queensland only.)



Expect to spend about 2000 kilojoules (500 Calories) on a kebab, but —

kebabs ain't kebabs. Some can blow the fat out to nearly two tablespoons, and though **UNCLE TONY'S** look the best on paper, it's mainly because they're much smaller than **ALI BABA'S** or **THE KEBAB COMPANY'S**.

A falafel roll is a good choice (and means vegetarians are happy), but some of the other kebabs on offer are just as good.



AND THE WINNERS ARE...

If the kids drag you to worship regularly at the fast-food altar and you're looking for something that amounts to more than a tiny burger yet is healthier than the usual chain offerings, try **RED ROOSTER'S Sub 97**, or a visit to **NANDO'S** will give you a few options that won't break the nutrition bank. A **KFC Original Fillet Burger** — if you go for potato and gravy or coleslaw with it instead of chips — can be a reasonable option. **SUBWAY** offers plenty of choice as long as you're careful not to add the high-fat options. A falafel roll or some of the kebabs are also good choices.

KIDS' MEALS

You may have wondered how the kids' meals stack up. Well, when we did the sums across the offerings from **MCDONALD'S**, **KFC**, **RED ROOSTER** and **HUNGRY JACK'S**, we found they were all much the same. A kid's meal buys you 2000 to 3000 kJ, 20 to 30 grams of fat and may weigh more salt than a kid needs.

Not exactly health food figures — so if there's a bonus toy it had better be good!

Meal details

Outlet	Menu item (in order of energy per serve within meal type)	Energy (kJ / Cal per serve)	Fat (g / serve)	Sodium (mg / serve)	Size (g / serve)
BURGERS					
MCDONALD'S	Junior Burger	1110 / 264	9	440	105
MCDONALD'S	Cheese Burger	1300 / 310	13	660	120
HUNGRY JACK'S	Whopper Junior	1700 / 406	25	550	160
HUNGRY JACK'S	Whopper Junior with Cheese	1880 / 449	28	730	170
MCDONALD'S	Big Mac	2050 / 490	25	890	215
MCDONALD'S	McOz	2230 / 533	25	1070	285
MCDONALD'S	Quarter Pounder with Cheese	2300 / 549	28	1250	205
HUNGRY JACK'S	Aussie Burger	2700 / 646	35	820	310
HUNGRY JACK'S	Whopper	2780 / 666	41	540	270
HUNGRY JACK'S	Whopper with Cheese	3140 / 752	48	900	295
HUNGRY JACK'S	Double Beef and Cheese Whopper	4180 / 1002	67	980	375

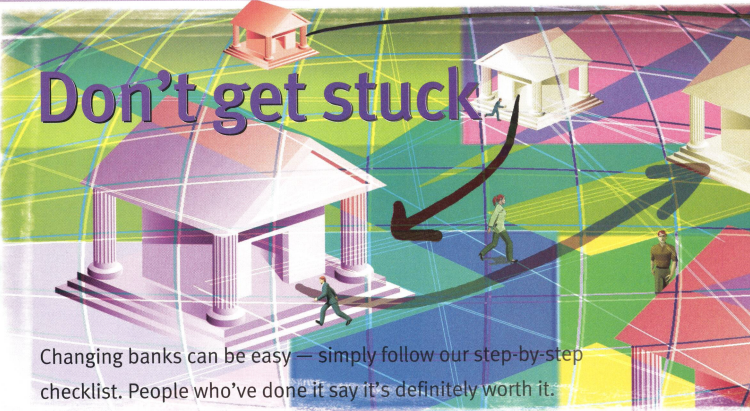
Outlet	Menu item (in order of energy per serve within meal type)	Energy (kJ / Cal per serve)	Fat (g / serve)	Sodium (mg / serve)	Size (g / serve)
CHICKEN BURGERS					
HUNGRY JACK'S	Grilled Chicken Burger	1420 / 341	17	780	155
RED ROOSTER	Chicken, Cheese and Bacon Burger	1430 / 342	16	1000	135
McDONALD'S	McChicken	1800 / 431	19	830	180
NANDO'S	Chicken Burger	1830 / 435	15	660	245
KFC	Original Fillet Burger (E)	1900 / 452	18	1090	210
KFC	Original Bacon & Cheese Burger (F)	2120 / 505	22	1520	215
KFC	Original Zinger Burger (G)	2240 / 533	25	1040	215
RED ROOSTER	Crispy Fillet Burger	2270 / 540	28	1350	230
KFC	Zinger Bacon & Cheese Burger (H)	2580 / 613	33	1520	240
FISH BURGERS					
McDONALD'S	Fillet-o-Fish	1460 / 347	14	680	140
HUNGRY JACK'S	Ocean Catch	2050 / 494	30	810	170
VEGIE OPTIONS					
SUBWAY	Veggie Delite	990 / 236	4	520	175
UNCLE TONY'S (A)	Falafel Kebab	1050 / 250	6	470	160
THE KEBAB CO (B)	Vegetarian Kebab	1670 / 398	8	600	260
NANDO'S	Veggie Pita	1940 / 463	18	770	290
ALI BABA (C)	Falafel Roll (Super Vegetarian)	2190 / 522	14	970	320
NANDO'S	Veggie Burger	2190 / 521	19	830	280
HUNGRY JACK'S	Veggie Burger	2880 / 686	39	1260	285
KEBABS					
UNCLE TONY'S (A)	Salad Kebab	1010 / 241	8	450	160
UNCLE TONY'S (A)	Doner Kebab	1090 / 260	10	350	160
UNCLE TONY'S (A)	Chicken Kebab	1250 / 297	12	390	160
ALI BABA (C)	Lamb Kebab	1840 / 441	19	1020	290
ALI BABA (C)	Chicken Kebab	1910 / 458	18	810	290
THE KEBAB CO (B)	Chicken Kebab	1940 / 462	17	360	300
ALI BABA (C)	Beef Kebab	2220 / 531	29	930	290
THE KEBAB CO (B)	Doner Kebab	2620 / 624	34	1320	300
CHICKEN WRAPS AND SUBS					
SUBWAY (D)	Roasted Chicken (7 under 6)	1350 / 321	6	750	245
SUBWAY (D)	Sweet Onion Chicken Teriyaki (Select)	1560 / 371	6	1380	270
RED ROOSTER	Fresh Sub 97	1830 / 435	6	1490	270
SUBWAY (D)	Chicken Fillet (Classic)	1860 / 443	20	1090	250
RED ROOSTER	Chicken Playas — Original	2460 / 586	36	1150	240
KFC	Twister	2610 / 622	33	1400	245
RED ROOSTER	Chicken Roll	2780 / 662	33	1370	240
RED ROOSTER	Strip Sub	3320 / 792	41	1600	290
CHICKEN BITS 'N' PIECES					
NANDO'S	5 chicken ribs	1030 / 245	15	720	125
KFC	Nuggets — 6	1160 / 277	17	650	110
McDONALD'S	McNuggets — 6	1270 / 303	18	480	110
KFC	Kentucky BBQ — quarter	1420 / 339	23	900	150
RED ROOSTER	Quarter chicken (wing)	1420 / 339	18	950	180
NANDO'S	Quarter chicken breast with skin	1450 / 345	14	960	175
KFC	Popcorn chicken — regular serve	1530 / 365	22	820	120
RED ROOSTER	Nuggets — 8	1590 / 379	25	750	140
HUNGRY JACK'S	Nuggets — 7	1600 / 386	25	770	135
KFC	Original recipe chicken — 2 pieces	1900 / 453	29	840	160
KFC	Crispy strips — 3	2060 / 491	22	820	205

The data is taken from nutrition information provided by the manufacturers. The figures are rounded to the nearest 5 gram serve size, 10 kilojoules, single Calorie, 1 gram fat and 10 mg sodium

- (A) Uncle Tony's Kebabs are in Queensland only.
 (B) The Kebab Co is based in WA, with one outlet in Victoria.
 (C) Ali Baba is national, but has most outlets in NSW, the ACT and Victoria.
 (D) The Subway products listed here are only the chicken varieties for comparison.
 (E) Different in Queensland and WA: 1930 kJ/459 Cal, 21 g fat, 970 mg sodium, 180 g size.
 (F) Different in Queensland and WA: 2260 kJ/537 Cal, 26 g fat, 1310 mg sodium, 215 g size.
 (G) Different in Queensland and WA: 2340 kJ/556 Cal, 31 g fat, 1060 mg sodium, 205 g size.
 (H) Different in Queensland and WA: 2660 kJ/632 Cal, 36 g fat, 1440 mg sodium, 230 g size.



Don't get stuck



Changing banks can be easy — simply follow our step-by-step checklist. People who've done it say it's definitely worth it.

IN A NUTSHELL

■ We asked CHOICE subscribers who'd changed banking services to tell us about their experiences and received a whole boxful of letters. Thanks to all of you who responded.

■ Your main reasons for changing accounts were high fees and unsatisfactory customer service. For more on customer satisfaction with banks, see the results of our survey last year in CHOICE, November 2002.

Changing transaction accounts and credit cards is not as hard as you might think, say CHOICE subscribers who told us about their experiences with switching.

While there are a few things that need care, such as changing over direct debits, overwhelmingly the letters we received reported positive experiences, and consumers recommended that others switch as well if they're dissatisfied.

SETTING UP THE NEW ACCOUNT

You can usually apply for a new transaction account or credit card over the phone, online or by going to a branch of your new bank, credit union or building society.

Amy Turner from Sydney reports how efficiently this was handled by her new bank. She went to a branch and talked to a customer service assistant, who explained options and helped her decide on an account.

Amy says, "The customer service assistant set up phone and internet banking and also opened a Visa account that she linked to my transaction account for easy payment. I was able to have one card for both

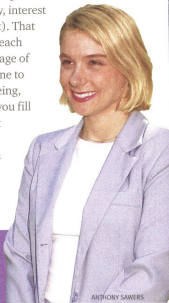
accounts and got to pick my PIN on the spot. All this took about 40 minutes. I've never been happier with any banking service."

CHANGING OVER

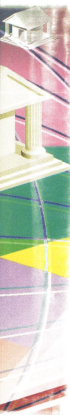
Keep the old account open while you transfer periodic credits and deductions to your new account.

Angelika Lange from Guildford in NSW says, "I had to change seven regular direct debits (gas, electricity, Telstra, Optus, WorldXChange, water, CHOICE subscription) and two regular income streams (salary, interest from a savings account). That took a while: you ring each company, wait an average of 15 minutes on the phone to talk to a real human being, they send out a form, you fill in the form and send it back. If you're lucky you get a confirmation letter sent to you. To check for any unexpected

"All this took about 40 minutes. I've never been happier with any banking service." Amy Turner, Sydney.



ANTHONY SAWERS



deductions or deposits, I kept my old account for another six months before I closed it."

A FEW PROBLEMS

While most letters we received reported positive experiences, some people told us about problems with changing over regular payments, mainly because they had already closed their old account.

Helena Bruyn from Port Noarlunga in SA switched credit cards and says, "The only problem I encountered was a monthly gym membership which got debited from my credit card. I forgot to tell the gym that I'd changed cards, so I got a letter from them saying payment had been declined. I fixed things up with them without incurring a financial penalty."

Mary Huin from Sydney had problems switching the payment of her credit card. "I couldn't cancel the direct debit from my old account over the phone. They took a week after my initial call to send me the form. It was the wrong form! I had to call them a second time to request the appropriate form. By the time I received the new form I'd already received a bill and was told that it was too late and the new account couldn't apply to that bill."

"To avoid a direct debit from the old account that I'd already closed I had to pay the bill manually. Then after my application was processed I received a confirmation letter that didn't seem right, so I called them a third time to check what they'd actually done. They could only tell me that my records had been updated the day before. At this stage until I receive the next bill I don't know if they've changed my details correctly."

Other hassles reported were long waits in queues and for telephone enquiries.

WAS IT WORTH IT?

We received many letters from people who were very satisfied with their move, such as Lina Cavallin from Fulham in SA, who says: "I'm extremely satisfied with the service I receive at my new bank and absolutely recommend that people switch if dissatisfied."

Some people reported they were initially hesitant to change as they thought it'd be too much hassle. As Clare Taylor from Thornlands in Queensland says, "We tend to get into a comfort zone — the thought of changing banks is a little scary, to be quite honest — and feel it's easier to stay."



WENDY LONG

"I can't believe how easy it was. Overall we're very happy with our move. It's wonderful to get good service for a change."
Clare Taylor, Thornlands, Queensland.

She found it wasn't as hard as she'd thought. "I can't believe how easy it was. Overall we're very happy with our move. It's wonderful to get good service for a change — they make you feel that they work for you and not the other way round."

And would they do it again? Overwhelmingly, the answer is yes. As Karen and Carlton Longhurst from the Northern Territory say, "We can't understand why people complain about the raw deal they're getting from their bank and then don't do anything about it."

How to save even if you don't switch

ON CREDIT CARDS

- If you pay interest, choose a card with a low interest rate.
- If you always pay your balance in the interest-free period, look for the maximum interest-free days and a low annual fee.
- If you have multiple cards consider amalgamating your debt into one card.
- Don't use cash advances.

ON ACCOUNT FEES

- Stay clear of other banks' ATMs and avoid over-the-counter transactions.
- If you've got several accounts, consider consolidating them into one so you don't pay multiple fees.

If you've got a mortgage, ask your lender whether you're entitled to discounts on transaction account and/or credit card fees. For more on such *Home loan packages*, see CHOICE, March 2003.

GET MORE FOR YOUR CASH

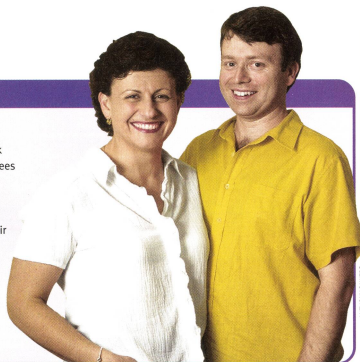
Even if you're happy with your transaction account, consider moving any excess funds to a high-interest electronic savings account, paying up to 4.8% interest.

For more information see Bump up your savings in CHOICE, April 2002, or for a listing of available accounts with their current interest rates go to www.choice.com.au/money and click on Short-term investment.

A GOOD REASON TO SWITCH

A complaint that wasn't resolved satisfactorily, the introduction of new bank account fees or an increase in credit card fees prompted many people to switch.

For example, Chris and Marie Mooney from Sydney decided enough was enough when both their credit cards increased their fees, charging them a whopping \$284 per year. Chris immediately decided to switch to a credit card with lower fees and Marie will switch to it as well before her next annual fee becomes due. This will save them \$260 a year in annual fees.



Step by step: switching accounts and credit cards

STEP 1 — FIND A BETTER DEAL

Go to www.choice.com.au/money and click on *Compare bank fees* for a database with transaction account fees from 17 banks and 50 credit unions. For credit cards, click on *Choose the right credit card* for a credit card finder, or ask some financial institutions about their account and credit card options. For more on credit cards, see *Hip Pocket*, CHOICE, December 2002.

STEP 2 — OPEN THE NEW ACCOUNT

With many financial institutions you can apply for a credit card or open a new account online or over the phone. To activate the account or credit card you usually need to go to a branch to sign documentation and identify yourself (the 100-point check), so it's worth checking over the phone beforehand what identification you need. They can also set up phone banking and online banking if you want to use

these services. Check whether you can change your PIN, so that you can remember it easily. However, don't choose easy-to-break passwords such as children's names, dates of birth or your rego number, in case your wallet gets stolen.

STEP 3 — CHANGE OVER

Once the new account is set up and working properly, change over any regular debits and credits. Look over 12 months' worth of statements from your old account to find them; your old bank may even be able to give you a list of them. Also ask your new bank whether it can help you with the transfer.

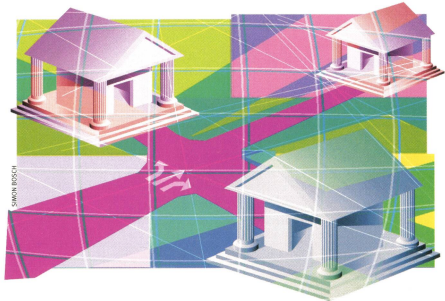
■ **Direct credits:** Tell your employer to start paying your salary into the new account. Also make sure account details are changed for government benefits such as the age pension, and for returns on investments (such as dividends from shares or interest on term deposits).

■ **Periodic payments:** Check for payments such as your home loan, personal loan or credit card and transfer them to your new account. You need to cancel them with your old bank and give your new bank the details of the account to which the payment is made in order to set them up again.

■ **Direct debits:** Check whether there are direct debits from your old account, such as health insurance, your phone bill or gym membership. If so, the best way is to call the organisation to cancel the direct debit to the old account; it'll usually send you a form to fill in to activate a direct debit from the new account.

STEP 4 — CLOSE THE OLD ACCOUNT

Leave the old account open for a time to make sure all transfers have worked out properly. Leave enough funds in the account in case anything goes wrong. Once you're sure everything has worked out, close the account and cut up your old card.



Pampering YOUR FACE

Do you have to break the bank for a moisturiser that feels and smells good?

Have you ever wondered whether the cheap moisturiser in the unassuming plastic jar on your supermarket shelf will do as good a job as the more expensive one you're using now?

Or whether you'll really get a much better product if you spend even more for a premium French brand?

This article provides some answers. Over 300 CHOICE Home Testers tried 47 different moisturisers for the face and give you their verdict. The table, page 19, reveals how they rated the brands overall and for texture, fragrance and absorption, and how much they cost. And on page 17 you'll find profiles and comments for the seven top-scoring products.

WHY MOISTURISE?

Our skin has three major layers: the epidermis on top, the dermis below it and the subcutaneous layer at the bottom. The epidermis itself consists of five basic layers. New skin cells are made in its inner layer and work their way up to the outer layer (stratum corneum), where they gradually dry out and are eventually shed.

Collagen and elastin, which give the skin its structure and resilience, are made in the dermis. This layer also contains the sebaceous glands, which secrete sebum, an oily mixture of fats that maintains the skin's natural moisture balance and acid mantle.

As we age, the sebaceous glands produce less sebum and the skin loses moisture more easily and tends to get drier. Environmental influences such as exposure to sunlight, air conditioning and heating also take their toll on the skin, as do hormonal changes.



HOW MOISTURISERS WORK

A moisturiser helps restore the skin's fat and moisture balance. It works in the stratum corneum, plumping the dry cells up with water and/or fats and slowing the loss of moisture, so the skin looks smoother and feels softer.

Moisturisers usually contain humectant and/or occlusive ingredients mixed with water.

■ Occlusive ingredients such as petroleum jelly, lanolin or moisturising oils prevent moisture from leaving the skin, so they're best applied while the skin is still damp to seal in the moisture. Such moisturisers will soothe the irritation of dry skin, but they can leave it feeling greasy, so they may not be an ideal choice for every face.

IN A NUTSHELL

- In the trial:** 47 moisturisers for your face, ranging in price from as little as 20 cents for 50 mL to a whopping \$93. Our trialists found several good ones for well below \$10 for 50 mL.
- Seven products** stood out from the rest; one of the cheapest was rated best for absorption (see What to buy, below).
- For the high price** you pay for some premium French brands you're guaranteed to get ... a lot more packaging.

WHAT TO BUY

	Price per 50 g or mL
LANCÔME Vinéfit Complete Energising Moisturiser	\$59.00
GARNIER Synergie Quenching Moisturising Cream	\$6.66
HOME BRAND Skin Repair Cream (from Woolworths)	\$0.32
CHRISTIAN DIOR Hydra-Move Dynamic Moisture Booster Creme	\$82.00
NIVEA Visage All Day Aqua Moisture Rich Creme	\$12.21
OLAY Moisturising Lotion	\$4.00
OLAY Moisturizing Cream	\$6.48

WHAT'S GREEN TEA DOING IN MY MOISTURISER?

See Hopes, dreams and \$100 creams in last month's CHOICE for information on sunscreens (UVB and UVA filters), antioxidants (Vitamins A, C and E, green tea), exfoliants (alpha- and beta-hydroxy acids) and many other ingredients that can be in a moisturiser as well as in the anti-aging creams we covered last month.

■ **Humectant** ingredients such as glycerine attract water from the surrounding air and the skin itself to slow down its water loss. Such moisturisers usually feel lighter and won't leave a thick film on your skin. However, the American Academy of Dermatology now recommends avoiding the humectants propylene glycol and sorbitol: both bind water to the skin but also repel it, which cancels out their benefits.

LOTION OR CREAM?

Moisturisers for the face are basically mixtures of oil and water, with other ingredients added to prevent them separating and improve fragrance, texture, shelf life and colour.

Lotions are thinner and contain less oil and more water. They're good if you have acne or oily skin and want to avoid heavy creams that take longer to absorb, or if you live in very hot (dry or humid) conditions.

Creams are usually a mixture of 40–60% oil and water. The thicker the consistency, the higher the oil content, and the better they are for more mature and dry skin, or for cold climates.

Our trial included both creams and lotions, all designed for everyday use on normal skin. In general the trialists rated the creams slightly higher than the lotions, preferring the thicker, creamier consistency of creams and their generally stronger scent.

WHAT MATTERS MOST

Judging from our trialists' comments, the perfect moisturiser feels velvety, silky, smooth and creamy. It

has a subtle though not overpowering fragrance, absorbs easily and completely and is reasonably priced.

Texture, price and fragrance mattered most to the trialists. How long it takes to absorb, how long it leaves your skin feeling moisturised, and whether it contains a sunscreen were also important to some, but not as much as how good it feels on the skin.

TEXTURE

If texture matters most to you, the two top-scoring LANCÔME Vinéfit and GARNIER (cream) moisturisers shouldn't disappoint you. They got the highest scores for texture as well as overall. Of the two, the GARNIER is much cheaper. Other brands that also rated comparatively well for texture include THE BODY SHOP Vitamin E Moisture Cream, NIVEA Visage, Dr LeWinn's, POND'S and the two OLAY moisturisers.

Those to avoid include both JURLIQUE moisturisers. "No way I'd use it; maybe a good barrier cream for nappy rash," said one trialist about the cream, which was found to be oily, thick and gluggy. The lotion, on the other hand, was thought to be thin, "a bit like smearing melted butter onto the face", as another trialist put it.

The texture of the BLACK & GOLD, CLINIQUE, CLEARASIL, SHISEIDO and NEUTROGENA moisturisers also disappointed, mostly with a thin and runny consistency, eliciting comments such as: "Felt too thin and more as if you were wetting your skin — not moisturising it," for the BLACK & GOLD lotion.

(For full product names, see the table, page 19.)

Continued on page 18

Can you use a body moisturiser on your face?

Using a body moisturiser on the face may be all right for many people who don't have sensitive skin, according to our US sister organisation. It tested body, facial and hand moisturisers in January 2000 and found that all three types had similar ingredients, but their formulations probably varied, because on the whole, the facial products moisturised better than those made for the body. The hand products fell somewhere in the middle range.

Its advice: If you're budget-minded, give a body moisturiser a go and see how your face reacts. But don't forget a sunscreen — body lotions usually don't contain one.

HELPING YOUR SKIN STAY SUPPLE

- Apply moisturiser just after showering or bathing to retain the water absorbed by the skin.
- Use a sunscreen (or a moisturiser with a sunscreen) with an SPF of 15+ any time you're outdoors, summer and winter.
- Avoid exaggerated cleanliness. Water, and particularly hot water, tends to dry out the skin and washes away its natural oils. So have shorter showers and baths and use lukewarm rather than hot water. Use soap or shower gel (possibly with added moisturisers) only for the important parts and rinse residues off thoroughly.
- Pat your skin instead of rubbing it dry.
- Drink lots of water.
- If you spend lots of time in air-conditioned or centrally heated environments, keep bowls of water near vents or use a humidifier.
- If you have dry skin, avoid astringents and products with alcohol, which strip moisture away from the skin.
- If you have oily or problem skin, use products for your skin type, which shouldn't contain heavy oils or clog up pores.
- If you have sensitive skin, use moisturisers designed for it, which should be free of ingredients that could irritate your skin (such as alcohol, lanolin, parabens, formaldehyde or other substances known to irritate sensitive skin).

Profiles

Profiles are in rank order, from left to right, of the top seven moisturisers as ranked by the trialists. Prices are per 50 g or mL (actual bottle or jar sizes vary; we bought the largest size available).

LANCÔME VINÉFIT COMPLETE ENERGISING MOISTURISER

Price: \$59 per 50 mL

GOOD POINTS

- Feels creamy, thick and velvety.

- Very easy to get the last bit out of the jar.

BAD POINTS

- Excessive packaging (see page 18).
- Expensive.

TRIALISTS' COMMENTS

- "Absorbed well and felt good."
- "Sweet, fresh fragrance but not overbearing."
- "Very little went a long way."



GARNIER SYNERGIE QUENCHING MOISTURISING CREAM

Price: \$6.66 per 50 mL

GOOD POINTS

- Absorbs well.
- Smells fruity.

BAD POINTS

- None.

TRIALISTS' COMMENTS

- "Very good texture, somewhat creamy."
- "Left skin nice and smooth."
- "Light, fresh, effective — powder can go on minutes later, without darkening or turning into sludge."



HOME BRAND SKIN REPAIR CREAM

(from Woolworths)

Price: \$0.32 per 50 g

GOOD POINTS

- Absorbs well.
- Smells floral.
- Feels silky.
- Very easy to get the last bit out of the jar.
- Minimal packaging.
- Very cheap.

BAD POINTS

- None.

TRIALISTS' COMMENTS

- "Pleasant fragrance: subtle, not overpowering."
- "Very smooth to apply and a nice feel."
- "Its very high absorption quality makes it an excellent choice under make-up."



CHRISTIAN DIOR HYDRA-MOVE DYNAMIC MOISTURE BOOSTER CREME

Price: \$82 per 50 mL

GOOD POINTS

- Smells floral.

BAD POINTS

- Excessive packaging.
- Expensive.

TRIALISTS' COMMENTS

- "Absorbed well; skin still felt soft after several hours."
- "Smell not too strong — quite subtle."
- "Very pleasant to use, with good results."



NIVEA VISAGE ALL DAY AQUA MOISTURE RICH CREAM

Price: \$12.21 per 50 mL

GOOD POINTS

- Feels creamy.

BAD POINTS

- Excessive packaging.

TRIALISTS' COMMENTS

- "Made my face smell clean, like it had been freshly cleaned."
- "Very nice, not too oily and not too watery."
- "Good for the summer as it's nice and light on the skin."



OLAY MOISTURISING LOTION

Price: \$4 per 50 mL

GOOD POINTS

- Absorbs well.
- Smells sweet and floral.

BAD POINTS

- Fairly hard to get the last bit out of the bottle.

TRIALISTS' COMMENTS

- "A small amount goes a long way."
- "Nice and light; felt good on my skin."
- "A comforting smell — reminded me of baby powder."



OLAY MOISTURIZING CREAM

Price: \$6.48 per 50 g

GOOD POINTS

- Smells sweet.
- Very easy to get the last bit out of the jar.

BAD POINTS

- None.

TRIALISTS' COMMENTS

- "A strong fragrance, but not overpowering — like something I put on my baby."
- "Really liked the texture — beautiful."
- "Smooth, easy to apply."



CHOICE HOME TESTER

The trial

Our thanks go to our growing base of CHOICE Home Testers who, for about a month late last year, endured some strong-smelling, oily, sluggish or watery moisturisers on their cheeks — all in the name of research. (But they got to try some good ones and some expensive brands too, of course.)

Altogether 343 Home Testers (including 23 men) trialled the 47 moisturisers for us. Each trialist received eight different moisturisers — in unlabelled white containers, as usual, so they wouldn't know which brand they were using. They tried each one for three consecutive days on their cheeks and then filled in a survey form for each sample.

The trialists rated each moisturiser overall, and for texture, fragrance and absorption. They also indicated whether they'd buy it if it was reasonably priced.

If it's expensive, you can be pretty sure it's also excessively wrapped.



The more you pay, the more you get ...

The more you pay, the higher the chances you'll like the moisturiser? Not necessarily. Our trial showed no correlation between a moisturiser's price and whether the trialists liked it. However, it did reveal one thing: the higher the price, the more packaging you'll get — at least with the products in our trial.

All the moisturisers that cost over \$50 per 50 g or mL had excessive packaging, as did a few other less expensive brands. Topping the list of excessive wrapping were DIOR, CLARINS, LANCÔME Hydra Zen, NIVEA Visage and YVES SAINT LAURENT.

And as you'll probably guess by now, the manufacturers of the least expensive moisturisers in the trial also bothered least with elaborate wrapping — and fared pretty well in our packaging assessment.

For this assessment, we looked at the number of materials used in each product's packaging, its weight compared with the product's weight, and how easy it is to get the last bits of the moisturiser out of the container. For example, a plastic tube with a small opening is more difficult to empty than one with a wider opening, but easier than a narrow glass bottle.

For the top seven moisturisers in the *What to buy* list, particularly good or bad results of the packaging assessment are listed in the profiles. For the rest you're generally safe to assume that the cheaper the moisturiser, the less likely it's excessively wrapped, and the lower the packaging's impact on the environment.

Packaging does, of course, serve a useful purpose, but in excess it puts an additional, unnecessary strain on the environment. And that's not just for its disposal. Producing packaging costs energy, which in turn, in most cases, produces air pollutants and greenhouse gases as well as solid and liquid waste.

If you care about reducing the amount of waste we create, ask manufacturers of excessively wrapped products to reduce their packaging.

From page 16

We've just used the brand names here, unless a brand had more than one moisturiser in the trial.)

FRAGRANCE

The trialists, most of whom were women, liked a floral, fruity, sweet or citrus scent best in a moisturiser and rated the three products in the *What to buy* list from French manufacturers (LANCÔME Vinéfit, CHRISTIAN DIOR Hydra-Move and GARNIER (cream)) best for fragrance.

Other brands with comparatively high ratings for fragrance include THE BODY SHOP Vitamin E Moisture Cream, POND'S, CLARINS Multi-Active Day Cream, L'ORÉAL, NIVEA Soft, OLAY (lotion) and RED EARTH.

They generally liked the moisturiser's fragrance best when it was of medium strength. Very little fragrance (as in NATURISTICS, CLEARASIL, CLINIQUE and BEAUTICIAN'S SECRET All Day Moisturising Lotion) was generally disliked, as were very strong or earthy, herbal and medicinal scents (as in LUSH Afterlife, both JURLIQUE products, PRICELINE, NATIO and BLACKMORES Botanical Solutions Day Creme Marshmallow).

"Sickly fragrance" and "wouldn't buy it due to fragrance" are just two of the trialists' comments about this BLACKMORES moisturiser. "Stinks too much" or "smell became increasingly intolerable" are representative of their thoughts about the JURLIQUE products' smell.

ABSORPTION

And for absorption the JURLIQUE cream didn't rate much better. "It sat on top of the skin, very oily and greasy," one trialist commented. The ESTÉE LAUDER, THE BODY SHOP Carrot Moisture and Dr LEWINN'S creams also rated comparatively low for absorption. HOME BRAND Skin Repair Cream, PRICELINE, GARNIER (cream), OLAY (lotion) and REDWIN were thought to absorb most completely.

If you wear make-up, it may be more important that your moisturiser absorbs completely, but those trialists that do only scored one product (REVLON Vitamin C Concentrate 4 Day and Night Moisturiser) much lower than those that don't. For all other moisturisers, the make-up question didn't influence their overall scores.

1 Overall score

The trialists gave an overall score for each moisturiser they tried, taking into account its texture, fragrance and absorption and other aspects, which they also rated separately. As with all the scores in the table, they're an average of trialists' ratings, converted to a percentage.

Moisturisers

Brand / type (in rank order, with the number of people who tried it)

	1 Overall score (%)	Texture score (%)	Fragrance score (%)	Absorption score (%)	Contains sunscreen (SPF)	Price (per 50 mL or g, \$)*
LANCÔME Vinéfit Complete Energising Moisturiser (42)	73	78	71	85	✓ (15)	59.00
GARNIER Synergie Quenching Moisturising Cream (47)	69	77	70	86		6.66
HOME BRAND Skin Repair Cream (Woolworths) (40)	67	67	62	89		0.32
CHRISTIAN DIOR Hydra-Move Dynamic Moisture Booster Creme (39)	65	65	70	82		82.00
NIVEA Visage All Day Aqua Moisture Rich Creme (46)	65	72	63	83	✓ (ns)	12.21
OLAY Moisturising Lotion (46)	65	70	65	86		4.00
OLAY Moisturizing Cream (50)	63	71	57	80		6.48
CLARINS Multi-Active Day Cream (42)	61	67	65	78		78.00
LANCÔME Hydra Zen Skin De-stressing Moisturiser (40)	61	64	60	83		90.00
L'ORÉAL Plénitude Hydrafresh Aqua Fluid (46)	61	69	65	84	✓ (ns)	13.10
NUTRIMETICS Nutri-Moist Moisturising Creme (43)	61	68	62	74		16.40
POND'S Hydro Nourishing Day Cream (41)	61	71	66	81		3.08
REVLON Vitamin C Concentrate 4 Day and Night Moisturiser (48)	61	61	60	77		32.50
THE BODY SHOP Vitamin E Moisture Cream (41)	61	73	68	84		16.95
NIVEA Soft Moisturising Creme (43)	60	66	65	75		2.86
YVES SAINT LAURENT Visible Énergie Complete Day Creme (47)	60	64	63	82		80.00
GARNIER Synergie Quenching Moisturising Fluid (43)	59	67	60	85		4.05
BEAUTICIAN'S SECRET All Day Moisturising Lotion (41)	58	67	48	80	✓ (ns)	16.95
PERSONA Moisturising Cream with Vitamin E (44)	58	67	58	74		0.40
REDWIN Vitamin E Creme (43)	58	62	56	86		0.57
DIOR Iod Hydra-Sorbent Aquatique (47)	57	60	62	76		57.00
RED EARTH Intense Moisturizer (40)	57	63	64	84		25.00
REVLON Absolutes Continuous Moisturising Cream (46)	57	62	60	72		26.80
JOHNSON'S pH 5.5 Facial Care Moisturising Day Cream (45)	56	60	63	76		3.10
BLACKMORES Botanical Solutions Day Creme Apricot + SPF8 (38)	55	62	54	74	✓ (8)	6.33
BEAUTICIAN'S SECRET Active Moisturising Complex (47)	54	58	54	85		41.58
DR LeWINN'S Private Formula Day Cream Moisturiser (50)	54	71	50	71	✓ (ns)	26.55
ESTÉE LAUDER Day Wear Protective Anti-Oxidant Creme (45)	54	61	50	69	✓ (15)	69.00
SHISEIDO The Skincare Day Essential Moisturizer (46)	54	49	63	72	✓ (10)	40.00
ARTISTRY Moisture Rich Protective Moisturiser — SPF15 (43)	53	65	55	72	✓ (15)	34.48
AVON Naturals Moisture Cream (45)	53	59	50	76		4.98
HOME BRAND Vitamin E Moisturising Lotion (Woolworths) (49)	53	61	50	83		0.20
LACURA Essentials Facial Moisturising Cream (47)	53	56	55	82		2.00
YVES SAINT LAURENT Grand Jour Protection Active Daylight Creme (41)	53	57	51	71		93.00
CLARINS Moisture Quenching Hydra-Balance Lotion (37)	52	57	57	76		68.00
THE BODY SHOP Carrot Moisture Cream (48)	51	57	49	70		16.95
NATIO Aromatherapy Natural Vitamin E Moisturising Cream (43)	50	64	41	84		4.12
NEUTROGENA Combination Skin Moisture Oil Free (50)	49	54	51	83		5.34
CLEARASIL Complete Oil Free Moisturising Lotion (48)	48	54	45	85		6.63
CLINIQUE Dramatically Different Moisturizing Lotion (40)	48	52	48	77		26.00
LUSH Afterlife (43)	48	65	35	84		50.00
NATURISTICS Facial Moisturiser (49)	48	55	44	80		3.25
BLACKMORES Botanical Solutions Day Creme Marshmallow (41)	46	56	35	80		5.08
BLACK & GOLD Oil of Beauty Moisturiser (43)	45	44	49	76		0.28
PRICELINE Aloe Moisturiser (38)	43	58	38	88		2.00
JURLIQUE Day Care Face Lotion (45)	41	50	37	73		33.93
JURLIQUE Day Care Face Cream (42)	38	44	43	50		27.18

* Based on the price we paid in Sydney in October 2002 for the largest size available.

ns Not stated.

Anyone for a CAPPUCCINO?

Do domestic espresso machines cut it in the coffee-making stakes, or should you leave it to the experts?

IN A NUTSHELL

■ The cheapest machine in our test made the best-tasting coffee, while an expensive one made the worst. And other expensive models made only average coffee, according to our expert tasters.

■ What's the difference between a latte and a macchiato? We give you an instant-expert rundown on the *café lingo* (page 22).

Partial to a good coffee? It's one of the little luxuries in life, but if you don't have access to a good coffee shop or you'd like to make cappuccino at home, you've probably wondered about a home espresso machine. Can you really get good coffee out of them?

To find out, we assessed 14 espresso machines for the quality of coffee they make, the time it takes to make it, their milk frothing ability and ease of use.

They're all pump or pump thermoblock machines, which operate at a much higher pressure than the cheaper steam machines and can make one or two cups at once. They can also froth your milk with the flick of a switch. A thermoblock pump is claimed to heat the water quickly to the perfect temperature for coffee making and milk frothing, but we found the time taken to make the first cup to be generally unrelated to whether it was a thermoblock pump or not.

WHAT'S YOUR PRIORITY?

Only the **KRUPS Novo 2100 Plus** performed consistently well for all the aspects tested. The other machines all had one or more areas that let them down.

If you care most about how good the coffee is, choose the **BREVILLE Café Roma**: it produced the best-tasting coffee as well as good milk froth. Unfortunately its ease of use score is lower because the supplied cups vibrated away from the nozzle as they were filling — if you didn't hold them in place the coffee would miss them. You have to stand by the machine anyway to turn it off when the cups are full, so many people may find it no problem keeping the cups in place — but be warned if it would irritate you. To see if this was just a sample problem we tested a second: it didn't vibrate as much, but we still had to hold the cups. The manufacturer says it'll take steps to fix the problem.

The other machines profiled on the right are also worth a look in terms of making reasonable coffee and having other good points, particularly if you can get them for a better price (try **CHOICE Shopper** — see page 3).



PHOTO: ANTHONY SP

WHAT TO BUY

Krups Novo 2100 Plus F962	\$299
Breville Café Roma ESP6	\$199

Features to look for

- Pump vs steam — a pump or pump thermoblock machine is essential if you want to make a good Italian-style espresso with good crema (see *What's crema?*, page 23) or you want to make consecutive cups of espresso. With a pump or pump thermoblock you can also froth or steam milk without having to make coffee first (for hot chocolate, for example), but with most steam machines you have to make coffee first so that the steam builds up.
- An easily removable water tank makes filling the machine easier.
- A removable drip tray for easy cleaning.
- Easy-to-clean surfaces — no cracks or grooves.
- Easy-to-use controls.
- The filter basket holder should hold the basket securely and be easy to clean.

PROFILES

The five models that made the best coffee are profiled in rank order. Prices shown are recommended retail as of November 2002.

KRUPS NOVO 2100 PLUS F962

Price: \$299

GOOD POINTS

- Performed well for all the aspects tested.
- Makes the equal second-best coffee.
- Good value.

BAD POINTS

- Small water tank, and the water level is hard to see.



SAECO MAGIC CAPPUCCINO ESPRESSO SIN 017R

Price: \$499

GOOD POINTS

- Can be used with prepacked coffee pods.

BAD POINTS

- The two cups fill slightly unevenly.
- Poor-quality, thin milk froth when using auto milk-frother.



BREVILLE CAFÉ ROMA ESP6

Price: \$199

GOOD POINTS

- Makes the best-tasting coffee.
- Good at frothing milk but takes a while for the steam to build up.
- Has a drip tray full indicator.
- Very good value.

BAD POINTS

- Didn't score well for ease of use — the cups vibrate away from the spout

and coffee pours into the drip tray if you don't hold them.

- Small water tank, and the water level is hard to see.
- Coffee/steam control switch is hard to turn.



GAGGIA EVOLUTION ESPRESSO

Price: \$399

GOOD POINTS

- Makes equal second-best coffee (which is the main reason we've profiled it, as it has a few bad points).
- Very easy to clean the exterior.

BAD POINTS

- Comparatively slow to make two cups of espresso.
- Small water tank, and the water level is hard to see.
- The filter holder is comparatively heavy and difficult to remove and replace.
- The steam nozzle is too close to the benchtop, so there's not enough room to manoeuvre the jug easily.
- Steam control knob is small and hard to turn.



DE'LONGHI ELETTRONICA EC430E

Price: \$599

GOOD POINTS

- The easiest to use.
- Can be programmed to stop water delivery at a predetermined point.
- Switches off automatically one hour after last use.
- Choice of two coffee temperatures.
- Drip tray full indicator.
- Can be used with prepacked coffee pods (premeasured amounts of coffee in a sachet that you insert into the machine).
- Easy to fill the tank and check the water level.
- Milk frothing is easy.
- Very easy to clean the exterior.

BAD POINTS

- Comparatively slow to make two cups of espresso.
- Fairly expensive.



WHAT ABOUT THE REST?

■ None of the other machines makes good coffee, scoring only 20% to 45% in the taste test. (Although the SOLIS CREAM SL 70 rated quite well overall, it only scored 35% in the coffee taste test.) All but the KRUPS Vivo froth milk reasonably well, though, and the DELONGHI, LA PAVONI, SAECO Via Venezia and SOLIS CREMA SL 70 are easy to use. Some machines are also very expensive — see the table, page 23, for prices.

FIXING PROBLEMS

As well as the BREVILLE's cups vibrating away from the spout, both SUNBEAM models filled the two cups unevenly. BREVILLE and SUNBEAM have advised us they'll be taking steps to rectify the problems we found with their machines.

Brand / model (in rank order)	PERFORMANCE				COMPONENTS OF COFFEE-MAKING SCORE			FEATURES	
	1 Overall score (%)	2 Coffee making score (%)	3 Milk frothing score (%)	4 Ease of use score (%)	5 Taste test score (%)	6 Time to brew first two cups (min:sec)	7 Coffee temperature (°C)	8 Cup-warming area	9 Cost
KRUPS Novo 2100 Plus P962	70	68	70	73	60	2:00	76	✓	✓
BREVILLE Café Roma ESP6	69	74	80	55	70	2:45	77	✓	
DELONGHI Elettronica EC430E	65	58	50	85	50	5:45	80		
SOLIS Crema SL 70	63	51	100	73	35	2:15	80	✓	✓
SAECO Magic Cappuccino Espresso SIN 017R	62	61	50	67	50	1:30	75	✓	
GAGGIA Evolution Espresso	60	63	50	57	60	6:30	75	✓	
LA PAVONI Eurobar De Luxe V230	60	52	80	70	35	2:00	82	✓	
SAECO Via Venezia Espresso SIN 006X	58	55	50	68	40	2:00	83		✓
SUNBEAM Café Crema EM4800	56	56	70	52	45	2:30	75	✓	
KENWOOD Creminissimo Café Espresso ES571	55	49	80	60	45	8:30	68	✓	
DELONGHI EC200	54	40	50	82	20	2:00	80		✓
SUNBEAM Bar Espresso EM3500	50	49	70	45	35	1:45	70	✓	
KRUPS Vivo Type 880	48	45	30	60	30	2:00	70		
GAGGIA Classic Coffee/B	43	35	50	58	20	6:30	75	✓	

* Prices are recommended retail, as provided by manufacturers in November 2002.

(A) The warranty says it 'excludes electricals'. In fact you're still covered by a statutory warranty that says a product must be of merchantable quality. You'd expect the electricals to last at least 12 months, so you'd have a case if they failed.

1 Overall score

This consists of:

- Coffee making score: 60%.
- Milk frothing score: 10%.
- Ease of use score: 30%.

2 Coffee making score

This included:

- Taste test scores: 70% (see *The taste test*, far right).
- Time to make the first two cups of espresso: 15%.
- Temperature score: 15%.

3 Milk frothing score

John Anderson, coffee maker from The Australian Hotel at The Rocks, Sydney, assessed the milk froth produced by the machines.

4 Ease of use score

This was made up of scores for removing and filling the water tank, removing and replacing the filter basket, how easy it is to froth the milk, how easy the controls are to use and how easy the machines are to clean. It also includes coffee-making operation:

- Excessive vibration.
- The ability to fill two cups equally when making two cups of espresso.
- Whether the pump is turned off at a preset (adjustable) time or it has to be done manually.

5 Taste test score

See *The taste test*.

6 Time to brew first two cups

This is the time it took (to the nearest 15 seconds) to make the first two cups of espresso, starting with a cold machine, including the time it took for the machine to warm up.

7 Coffee temperature

This was the temperature of the coffee immediately after it was made. An espresso machine should be able to make coffee with a temperature in the cup of at least 70°C.

8 Cup-warming area

Some models have a warming plate to keep the espresso warm while you're frothing milk or if you're not ready to drink it immediately.

9 Cord storage

Some machines have a cavity underneath in which you can store excess cord to avoid clutter on the benchtop; it also makes it safer to use.

10 Type

See page 20 for more on the difference.

DO YOU KNOW YOUR LATTE FR

Do you always order a cappuccino because the rest of the coffee menu is a bit of a mystery? Here are a few varieties you'll be whipping up in no time with your new espresso machine.

■ **Espresso** is 40–45 mL of coffee with a good crema on top, made from about 7–8 g of fine, dark-roasted coffee and served in a demitasse (small cup). (In Australia, 60 mL is also a common measure for an espresso.)

■ **Short black** (also called ristretto or short espresso) is similar to espresso, but with a more concentrated aroma and flavour — the water flow is cut short at about 20–30 mL.

■ **Long black** (or long espresso) is the standard espresso with added hot water to make it up to 90 mL, served in a cappuccino cup of about 150 mL. Don't let the added hot water run through the ground coffee — it'll make it taste bitter.

■ **Double espresso** is two measuring spoons of coffee used to make 90 mL (or 120 mL) of espresso.



CIFICATIONS

Type	Warranty (years)	Origin	Manufacturer/distributor	Price (\$)*
p thermoblock	1	Portugal	Groupe SEB	299
p thermoblock	1	China	Breville	199
p thermoblock	1	Italy	Parex Industries	599
p thermoblock	1	Switzerland	Diamond C Services	595
p	1	Italy	Saeco	499
p	1	Italy	Shiro	399
p thermoblock	1 (A)	Italy	Euroespresso Machine	785
p	1	Italy	Saeco	599
p thermoblock	1	China	Sunbeam	300
p thermoblock	1	Italy	Hagemeyer	399
p	1	Italy	Parex Industries	299
p thermoblock	1	China	Sunbeam	200
p	1	Portugal	Groupe SEB	249
p	1	Italy	Shiro	629

What's crema?

It's the creamy-looking froth on top, and is what distinguishes espresso from other types of coffee. The high temperature and pressure caramelise the sugar naturally present in the coffee, aerate it and expel it with the espresso, along with emulsified oils and gas. It should be thick, creamy and stable and preserve the coffee flavour, aroma and temperature.

It's also a good guide to faults in the espresso-making process.

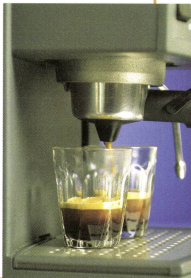
■ If it's light, inconsistent, thin and disappears quickly, the coffee has been under-extracted. This could be because it's too coarsely ground or the water wasn't hot enough.

■ If it's dark with a hole in the middle, there was either too much coffee in the filter basket or it was pressed down too firmly.

■ If it's white and has big bubbles, the coffee was probably over-extracted because the water was too hot.

■ If there's just a white spot in the middle of the cup, the coffee was probably over-extracted because it brewed too long.

■ Another tip is to make sure the coffee chamber is clean.



UR MACCHIATO?

■ **Macchiato** is an espresso with one spoonful of milk froth on top.

■ **Cappuccino** is served in a cappuccino cup of about 150 mL. It consists of one third espresso and two-thirds hot froth and steamed milk, which is either poured directly into the espresso (the Italian way) or, as is commonly done in Australia, separated into hot steamed milk, which is added first, and froth, with which the cappuccino is topped, before it's sprinkled with powdered chocolate.

■ **Caffe latte** contains more milk than coffee.

According to your taste, you can make it with one or two espressos and then fill the glass with hot steamed milk and a minimum of froth. It's usually served in a latte glass of about 250 mL.

■ **Flat white:** Similar to a latte but without the froth, and served in a coffee cup.

■ **Caffe mocha** consists of a standard espresso mixed with the same amount of strong, hot drinking chocolate and topped with hot frothed milk. It's served in a mug or glass.

■ **Viennese** (or Vienna coffee) is a standard or double espresso with a dollop of whipped cream, sprinkled with grated dark chocolate and served in a cappuccino cup.

(Adapted from the Krups training manual *Coffee for the Connoisseur: A Guide to the Selection and Preparation of Coffee.*)

The taste test

Three coffee experts made up our judging panel: Clelia Winton from Vittoria Coffee, Lance Witham from Witham's Coffee and Wayne Archer from Douwe Egberts Australia. They had the onerous task of slurping their way through samples from all 14 machines to assess which one made the best espresso.

They judged the crema colour and thickness, aroma, flavour, mouthfeel and aftertaste. In the end, the BREVILLE Café Roma was the only machine they felt made a 'good' espresso, while the DELONGHI Elettronica, GAGGIA Evolution Espresso, KRUPS Novo 2100 and SAECO Magic Cappuccino Espresso produced acceptable results.



Clelia Winton



Lance Witham



Wayne Archer

Nobody really enjoys doing the dishes, so an effective detergent can certainly ease the pain of the chore. So what's 'effective'? For this test we defined it as the number of plates 5 mL of each detergent would wash (in 5 L of hot water) before streaks or marks began to be left on the crockery. The more plates washed, the faster and more convenient the washing-up is likely to be.

But there are trade-offs: the most effective washing-up detergents are often the most expensive. Do you really need to pay top dollar? We found you don't. Among the most effective were three that washed around 600 plates per dollar you pay, compared to 275–500 for the others in the top seven: **MORNING FRESH** Original Super Strength, **PALMOLIVE** Original Biodegradable and **SUNLIGHT** with Natural Lemon.

THE TEST

Picture this: a stunningly successful dinner party, and the conversation and port flow into the wee hours. But lurking in the kitchen the morning after is a mountain of dirty dishes screaming 'wash me'!

Suds 'r' us?

Lots of us still do the dishes the traditional way, so we put 33 grease and grime busters to the test.

We put our lab through a similar horror. A recalcitrant mixture of melted butter, gravy mix powder, milk and grated cheese was allowed to dry on plates — and then it was time to wash.

The dishwashing liquid that washed the most plates was **AMWAY Dish Drops**. However, in terms of plates washed per dollar, it was by far the most expensive: 275 vs the overall cheapest (**UNAMAT**) with more than 2400.

CHEAP — BUT THAT'S ALL

Some products, notably **BLACK & GOLD** Lemon, **NO FRILLS** Bio Lemon, **BI LO** Pink and **HOME BRAND** Biodegradable Lemon, washed well over 1000 plates per dollar, but they're much less convenient than our Best Buys, washing only four or five plates per standardised squirt (vs 23 for the **AMWAY** and 18–20 for our Best Buys). We checked two of these detergents to see if doubling the dose doubled the number of plates washed. But it seems using more of a cheap detergent is a false economy — in our test doubling the dose only washed an extra one or two plates.

The table lists all the details of the detergents: number of plates washed per 5 mL, plates washed per dollar, and the cost to wash 10,000 plates — which we calculate as approaching a year's worth.

IN A NUTSHELL

- Three dishwashing liquids stand out for value among the top performers, which are otherwise quite expensive; see left.
- Using double the amount of a cheap detergent won't necessarily double the number of plates you can wash — see below left.



Need an excuse?

There are some sound environmental reasons to help you justify the expense of a dishwasher and save yourself labouring at the sink.

As we reported in a recent dishwasher test, a dishwasher can save you money on energy and water, depending on the machine you choose and your washing-up habits. See **CHOICE**, May 2001, for more information.

And recently, *New Scientist* magazine reported on a German survey that showed that, when handwashing dishes, the average person uses six times the amount of water and twice the electricity as a dishwasher.

A TIP FROM THE CHOICE KITCHEN

When washing very greasy items, use a premixed detergent solution in a plastic spray bottle to act as a prewash and help prevent detergent wastage.

Mix nine parts water to one part detergent. Spray onto high-grease areas after first wiping excess grease off with paper towel or newspaper — this will help prevent sewers and waterways being clogged with grease.

Brand / name (in order of plates washed)	1 Average plates washed per 5 mL	Plates washed per L	2 Plates washed per \$	2 Cost to wash 10,000 plates (\$)	Size (mL)	Strength	Origin	Manufacturer/distributor	2 Price per L
AMWAY Dish Drops (A)	23	4600	275	36.35	1000	Standard	USA	Amway	16.72
DAWN Powerplus Original Scent Concentrated	20	4000	494	20.26	375	Concentrate	UK	Proctor & Gamble	8.10
MORNING FRESH Original Super Strength	20	4000	569	17.59	500	Super-strength	Australia	Cussons	7.04
GREEN CHOICE Concentrated	19	3800	469	21.31	375	Concentrate	Australia	Southern Cross	8.10
PALMOLIVE Original Biodegradable	18	3600	612	16.33	500	Standard	Australia	Colgate-Palmolive	5.88
SUNLIGHT with Natural Lemon	18	3600	617	16.20	500	Standard	Australia	Unilever	5.83
MAAA'S Concentrated Apple	18	3600	467	21.41	375	Concentrate	ns	Reckitt Benckiser	7.71
PALMOLIVE Ultra Lemon Lime Concentrated	17	3400	388	25.78	375	Concentrate	Australia	Colgate-Palmolive	8.77
TANDIL Ultra Original Concentrated	17	3400	557	17.96	375	Concentrate	Australia	Aldi	6.11
MORNING FRESH Special Care Super Strength	17	3400	482	20.76	500	Super-strength	Australia	Cussons	7.06
BLAST Ultra Plus Zesty Citrus Concentrate	16	3200	649	15.42	600	Concentrate	Australia	Natures Organics	4.93
SWIFT Citrus	15	3000	888	11.27	500	Standard	Australia	IGA	3.38
COUNTRY LIFE	14	2800	718	13.93	500	Standard	Australia	Faulding Healthcare	3.90 (B)
BI LO	13	2600	1368	7.31	500	Standard	Australia	Bi Lo	1.90
EARTH CHOICE Pure Lemon Fresh	13	2600	1313	7.62	1000	Standard	Australia	Natures Organics	1.98
SAVINGS Super Strength Lemon	13	2600	1733	5.77	500	Super-strength	Australia	Coles	1.50
RELIANCE Super Strength Original	12	2400	964	10.38	1000	Super-strength	Australia	Coles	2.49
UNAMAT Green	12	2400	2424	4.13	1000	Standard	Australia	Aldi	0.99
TRIX Double Action Lemon Fresh Biodegradable	12	2400	612	16.35	500	Standard	Australia	Reckitt Benckiser	3.92
ADVANCE Biodegradable Fresh Lemon Fragrance	11	2200	612	17.58	500	Standard	Australia	Cussons	3.87
SPREE Lemon Fresh Readily Biodegradable	11	2200	838	11.94	1000	Standard	Australia	Colgate-Palmolive	2.63
MAAA'S Green Apple Biodegradable	10	2000	786	12.73	1000	Standard	Australia	Reckitt Benckiser	2.55
NO FRILLS Lemon Fresh Biodegradable	9	1800	1146	8.72	500	Standard	Australia	Franklins	1.57
STARMARK Premium Quality Concentrated Fresh Lemon Fragrance	9	1800	984	10.17	1000	Concentrate	Australia	Woolworths	1.83 (B)
HOME BRAND Lemon	9	1800	1200	8.33	500	Super-strength	Australia	Woolworths	1.50
BLACK & GOLD Lemon Fresh Biodegradable	8	1600	1067	9.38	500	Super-strength	Australia	AAPW	1.50
AUSTRALIAN EARTH Original Biodegradable	8	1600	750	13.34	1000	Standard	Australia	Aust. Earth Holdings	2.13
SO GENTLE Super Strength Lemon	8	1600	824	12.14	1000	Super-strength	Australia	Steric	1.94
BUSHLAND Biodegradable	7	1400	1120	8.93	2000	Standard	ns	Campbell Bros	1.25
BLACK & GOLD Lemon	5	1000	1807	5.53	2000	Standard	Australia	AAPW	0.55
NO FRILLS Bio Lemon	5	1000	1852	5.40	2000	Standard	Australia	Franklins	0.54
BI LO Pink	4	800	1495	6.69	2000	Standard	Australia	Bi Lo	0.54
HOME BRAND Biodegradable Lemon	4	800	1481	6.75	2000	Standard	Australia	Woolworths	0.54

ns Not stated.

AAPW Australia Asia/Pacific Wholesalers.

(A) When we used the unlikely-to-be-followed recommended dose of two thirds of a millilitre per litre of water, Amway washed 20 plates at \$28.42 per 10,000 plates – still the most expensive dishwashing liquid.

(B) Based on the price we paid (see note 2 below).

1 Average plates washed

This is the average number of plates washed effectively (no streaks or marks left) after standardised food leftovers were applied to plates and left to dry. We used 5 mL of detergent in 5 L of hot (50°C) water – see The test, far left, for more details.

2 Cost

From the average number of plates washed we calculated how many plates you could wash for \$1, how much it would cost to wash 10,000 plates (around a year's worth for an average family) and, for comparison purposes, the cost per litre of each detergent. The prices we used were averages calculated from a Sydney price survey in January 2003 that gathered numerous prices for each detergent.

TOP PERFORMERS

Plates washed per \$

AMWAY Dish Drops	275
DAWN Powerplus Original Scent Concentrated	494
MORNING FRESH Original Super Strength (BEST BUY)	569
GREEN CHOICE Concentrated	469
PALMOLIVE Original Biodegradable (BEST BUY)	612
SUNLIGHT with Natural Lemon (BEST BUY)	617
MAAA'S Concentrated Apple	467



Qantas surcharge not fair

Qantas is planning to start charging a 1% surcharge on credit card transactions in July, but doesn't intend to lower its fares.

It's introducing the new charge as a consequence of the Reserve Bank of Australia's credit card reforms, which allow merchants to charge customers directly for their banks' credit card processing fees.

Qantas used to build that cost into its airfares. If fares aren't reduced when the 1% surcharge is introduced, Qantas customers will be paying twice, and we don't think that's fair.

Like most other airlines, Qantas has introduced an online DIY booking system, which must result in considerable savings. You have to use a credit card with this service, just as you do for a telephone booking (though you can also use a corporate account on the phone). EFTPOS and debit cards aren't accepted.

Web bookings are convenient but you can't always be sure you're getting the best deal. Sometimes a travel agent may get you a better fare. The new surcharge gives you yet another reason to shop around for the best fare.

Always compare fares between available airlines and between airlines and travel agents. Help to make the market work by always looking for the cheapest fare and, if there's a choice, only go with Qantas if it offers the cheapest fare. If the direct and travel agent fares are the same, go with the agent and pay by cheque, cash or EFTPOS to avoid the new 1% credit card surcharge.



TAXED TO THE HILT

How many times is your super taxed? We all pay 15% on contributions, 15% on earnings and another 15% on final payouts. If you earn over \$85,000, you have to pay the superannuation surcharge as well.

We've been working hard to encourage the Federal Government to reduce the contributions tax. Write to your local member of parliament if you want to support our campaign.

Meanwhile, the Society of Superannuants (SOS) is campaigning for the abolition of the surcharge.

SOS and affiliated organisations have already spent \$50,000 identifying and documenting flaws in the surcharge tax and making representations to government and professional/business organisations. To read its full argument for rescinding the tax and find out how to support its campaign, go to www.sosaustralia.org.

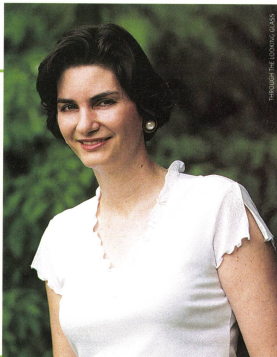
On-the-ball consumers save \$700,000

When Michelle from Queensland received her monthly VISA statement in December last year, she was unpleasantly surprised to see an increase in her annual fee to \$95.

While ANZ had informed her of the fee increase, Michelle wasn't due to pay it until November 2003, as her anniversary date (the day the annual fee is due) was before the fee increase came into effect.

Michelle immediately complained to ANZ. When CHOICE followed the matter up, the bank told us that through a computer glitch all 17,000 cardholders with an anniversary date shortly before the fee increase had been charged the increased fee.

After receiving complaints from Michelle and other consumers, the bank corrected the mistake and refunded a total of \$700,000 in fees to consumers who had been overcharged.



THROUGH THE LOOKING GLASS

WHAT TO BUY

35 MM	
MINOLTA Riva Zoom 160 Date	\$599
MINOLTA Riva Zoom 75W	\$349
ROLLEI Giro 70 WA	TEST BUY \$169

APS	
KODAK Advantix F620	TEST BUY \$229
MINOLTA Weathermatic Zoom	\$549

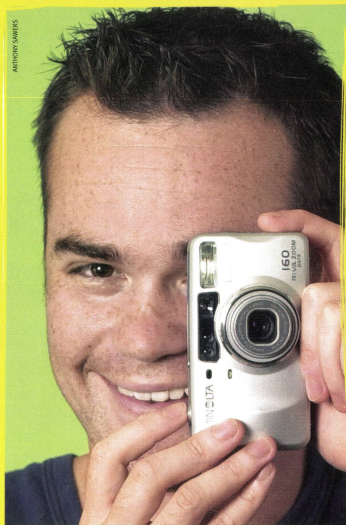
Both the MINOLTA Riva Zoom 160 Date and MINOLTA Riva Zoom 75W are pretty pricey, but they perform well in most areas. The Riva Zoom 160 Date is the better option if you're looking for a longer lens or taking pictures of fast-moving objects.

If you don't want to pay as much, the ROLLEI Giro 70 WA rates only slightly lower overall than the above two cameras.

The KODAK Advantix F620 is the second-cheapest APS camera in this test and has the best APS picture quality.

If you spend a lot of time at the beach, the MINOLTA Weathermatic Zoom is waterproof, as well as being the easiest APS camera to use.

ANTHONY SAWERS



Non-digital cameras are still worth buying.

FILM STILL FINE

IN A NUTSHELL

- Compacts are generally cheaper than digital cameras to buy — but the more expensive they are, the less attractive they become compared to digital.
- While all take acceptable pictures, some are very good.
- Strangely, the most and one of the least expensive cameras in this test both scored less than 50% for ease of use.

There's no doubt digital cameras are growing in popularity. However, film-based compact cameras are often cheaper to buy and can have some practical advantages.

Film is still a relatively cheap storage medium for images. It's bulky when compared to digital storage, but it's almost universally available and convenient — especially if you're travelling and don't want to lug a computer around, or have to find somewhere to download your images to a disk or the internet. Both can be inconvenient and costly.

In *Computer CHOICE*, Nov/Dec 2002, we did a simple cost analysis and found that, under some circumstances, a digital camera could pay for itself over a couple of years of use compared to a compact. However, for a low upfront cost or only occasional

use the traditional compact is still a good option.

Overall there's not much difference between digital and compact in size, weight or basic functions like zoom range and flash. The deciding factor is more likely to be your definition of convenience. If you find you take a lot of photos that you later discard, a digital camera may be for you. The ability to see your efforts almost immediately and retake them if necessary without taking up more space on your digital 'film' will save lots of money and heartache.

Continued on page 29

ON TEST

This report adds 25 new compact cameras to the 21 still on the market from our last update in March 2002.

	PERFORMANCE			4 FEATURES		4 SPECIFICATIONS			
Brand / model (in rank order)	1 Overall score (%)	2 Picture quality score (%)	3 Ease of use score (%)	Red-eye reduction	Date marking available	Focal length (mm)	Film speed range (ISO)	Flash range (m)	Shutter speed (sec)
35 mm									
MINOLTA Riva Zoom 160 Date	80	83	73	100 / MP	✓	37.5–160	25–3200	0.6 (W); 0.95 (T) to 6.5 (W); 2.8 (T)	0.2
MINOLTA Riva Zoom 75W	79	84	67	100 / SP	✓	28–75	25–3200	0.4 (W & T) to 8.4 (W); 3.3 (T)	0.6
CANON SureShot A1	77	81	65	50 / LB		32	25–3200	0.45 to 4.8	1 /
CANON Sure Shot Z155 (A)	76	80	66	100 / LB	✓ (C)	37–155	25–3200	0.6 (W); 0.75 (T) to 5.3 (W); 2.8 (T)	0.8
KONICA Z-up 130e	76	80	65	75 / LB	✓	38–130	25–3200	0.8 (W&T) to 7.2 (W); 2.2 (T)	0.7
KYOCERA / YASHICA Zoomate 165SE	76	80	64	50 / MP	✓	38–165	100–800	0.9 (W); 1.1 (T) to 5.5 (W); 3.0 (T)	0.8
MINOLTA Riva Zoom 115	76	84	57	75 / FLB	✓	37.5–115	25–3200	0.6 (W); 0.55 (T) to 7.2 (W); 3.0 (T)	0.7
RICOH R-ex 105z	76	81	65	100 / MP	✓ (C)	38–105	50–3200	0.6 (W&T) to 5.8 (W); 2.3 (T)	1.2
SAMSUNG Fino 120 Super	76	80	67	75 / LB	✓	38–120	50–3200	0.8 (W); 0.86 (T) to 6.5 (W); 2.5 (T)	1 /
SAMSUNG Vega 290W	76	79	69	100 / SP	✓	28–90	50–3200	0.6 (W); 0.7 (T) to 7.4 (W); 3.4 (T)	0.7
FUJIFILM Zoom Date 90 (B)	75	80	63	100 / LB	✓	38–90	50–3200	0.9 (W&T) to 4.0 (W); 3.4 (T)	0.7
KYOCERA / YASHICA Zoomate 90W (A)	75	82	59	75 / SP	✓	28–90	50–3200	0.5 (W); 0.8 (T) to 4.2 (W); 3.0 (T)	1 /
MINOLTA Riva Zoom 130	75	79	66	75 / FLB	✓	37.5–130	25–3200	0.6 (W); 0.65 (T) to 6.1 (W); 3.0 (T)	1 /
ROLLEI Giro 70 WA	75	80	64	100 / LB	✓	28–70	100–400	0.9 (W); 1.2 (T) to 3.5 (W); 2.0 (T)	0.8
FUJIFILM Zoom 70	74	77	68	75 / LB	✓	35–70	50–3200	0.8 (W&T) to 4.9 (W); 2.8 (T)	0.5
FUJIFILM Zoom Date 1300	74	78	64	75 / MP	✓	28–130	50–3200	0.65 (W&T) to 4.1 (W); 2.5 (T)	0.7
KONICA Z-up 90e	74	81	59	75 / LB	✓	38–90	25–3200	0.8 (W&T) to 5.0 (W); 2.3 (T)	0.8
LEICA Minilux Zoom	74	83	53	75 / SP	✓	35–70	25–5000	0.7 (W&T) to Print 7.5 (W); 4.0 (T)	0.6
OLYMPUS Superzoom 70G	74	81	57	100 / LB	✓	38–70	100–800	0.8 (W&T) to 4.4 (W); 2.4 (T)	0.5
OLYMPUS Superzoom 80G	74	82	57	75 / LB	✓	38–80	100–800	0.8 (W&T) to 4.4 (W); 2.3 (T)	0.5
CANON Sure Shot 105 ZoomS	73	77	65	50 / LB	✓	38–105	25–3200	0.6 (W&T) to 9.2 (W); 3.5 (T)	0.8
FUJIFILM Zoomdate 145	73	80	56	75 / MP	✓	38–145	50–3200	0.8 (W&T) to 7.5 (W); 2.5 (T)	0.7
PENTAX Espio 80V	73	80	57	75 / LB	✓	38–80	25–3200	0.8 (W&T) to 3.8 (W); 1.9 (T)	0.6
CANON Sure Shot 85 Zoom	72	77	59	50 / LB	✓	35–85	25–3200	0.6 (W & T) to 7.5 (W); 3.5 (T)	1.1
KONICA Lexio 115	72	79	56	25 / LB		38–115	25–3200	0.6 (W&T) to 7.1 (W); 2.5 (T)	0.7
MINOLTA AF50 Big Finder	72	81	52	100 / LB	✓	27	100–400	1 to 4	0.4
CONTAX TVSIll	71	81	48	50 / SP	✓	30–60	25–5000	0.5 (W&T) to 4.9 (W); 3.1 (T)	1.1
NIKON One-Touch Zoom 90s	71	75	60	75 / LB	✓	38–90	100–800	0.7 (W&T) to 4.9 (W); 2.3 (T)	0.6
OLYMPUS μ(mju)-II Zoom 170	71	77	59	75 / MP	✓	38–170	50–3200	0.8 (W&T) to 7.1 (W); 2.6 (T)	0.9
PENTAX Espio 115V	71	77	58	75 / LB	✓	38–115	100–400	0.8 (W&T) to 5.5 (W); 2.0 (T)	0.6
CANON Sure Shot 65 Zoom	68	74	52	50 / LB	✓	38–65	25–3200	0.6 (W&T) to 6.5 (W); 4.1 (T)	0.9
KONICA Z-up 115e	64	64	65	75 / LB	✓	38–115	25–3200	0.8 (W&T) to 7.2 (W); 2.6 (T)	0.7
MINOX CD 155	63	64	62	75 / LB	✓	38–155	50–3200	0.8 (W&T) to 5.6 (W); 2.1 (T)	0.9
SAMSUNG Vega 170	63	63	64	75 / SP	✓	38–170	50–3200	0.6 (W); 0.9 (T) to 4.4 (W); 2.1 (T)	0.8
OLYMPUS μ(mju)-II Zoom 80	62	61	62	75 / MP	✓	38–80	50–3200	0.6 (W&T) to 6.2 (W); 3.1 (T)	0.7
SAMSUNG Fino 80 Super	62	65	55	75 / LB	✓	38–80	50–1600	1.0 (W); 1.2 (T) to 5.4 (W); 2.8 (T)	1.1
FUJIFILM Zoom Date 125S	61	60	65	75 / LB	✓	38–125	50–3200	0.9 (W&T) to 5.2 (W); 3.4 (T)	0.7
PENTAX Espio 120SW	61	61	61	75 / SP	✓	28–120	25–3200	0.5 (W&T) to 4.6 (W); 2.2 (T)	1 /
KYOCERA / YASHICA Zoomate 70	57	60	50	100 / LB	✓	38–70	100–800	1.1 (W&T) to 5.7 (W); 2.8 (T)	0.5
MINOLTA Riva Zoom 70	55	57	50	100 / LB	✓	35–70	100–400	1.3 (W); 1.7 (T) to 4.3 (W); 2.8 (T)	0.3
APS									
KODAK Advantix F620	73	78	64	50 / LB	✓	24–48	50–1600	0.6 (W&T) to 7.3 (W); 4.0 (T)	1 /
MINOLTA Weathermatic Zoom	73	74	71	75 / LB	✓	30–50	100–3200	0.55 (W); 0.4 (T) to 5.1 (W); 3.2 (T)	0.6
CANON Elph LT260	69	74	57	75 / LB	✓ (C)	26–52	25–10000	0.45 (W&T) to 5.8 (W); 3.6 (T)	0.6
FUJIFILM Nexia Q1	62	67	48	50 / LB		22	100–800	0.6 to 3	0.6
PENTAX Efina T	62	59	69	75 / SP	✓ (C)	23–69	25–10000	0.65 (W&T) to 3.5 (W); 2.0 (T)	1.2
KODAK Advantix T700	56	57	54	100 / LB	✓ (C)	25–50	50–1600	0.6 (W&T) to 6.4 (W); 3.4 (T)	0.6

Dimensions (H x W, mm)	Weight (g)	Origin	Warranty (years)	Manufacturer / distributor	Price (\$)*
61 x 58	231	China	2	Haco	599
67 x 44	283	China	2	Haco	349
89 x 62	345	China	1	Canon	399
80 x 50	266	Taiwan	1	Canon	469
66 x 48	246	China	2	CR Kennedy	299
65 x 54	264	China	2	Tasco	499
61 x 40	244	China	1	Haco	249
64 x 36	230	China	2	Ricoh	299
64 x 43	239	ns	2	Adeal	249
67 x 47	279	ns	ns	Adeal	399
69 x 57	268	Indonesia	2	Hanimex	(B)
61 x 46	234	China	2	Tasco	320
60 x 46	255	China	2	Haco	349
64 x 46	251	Germany	3	Camera House	169
68 x 42	264	Japan	2	Hanimex	149
60 x 41	216	Japan	2	Hanimex	449
67 x 49	251	China	2	CR Kennedy	199
64 x 45	413	Germany	2	Adeal	1995
64 x 48	255	China	1	Olympus	139
64 x 48	255	China	1	Olympus	199
65 x 49	292	ns	1	Canon	289
70 x 60	285	Japan	2	Hanimex	349
70 x 49	259	China	1	CR Kennedy	159
64 x 46	268	China	1	Canon	229
63 x 40	232	China	2	Konica	349
68 x 37	236	China	2	Haco	99
65 x 41	363	Japan	2	Tasco	2100
65 x 50	246	Malaysia	3	Maxwell Optical	229
68 x 54	314	China	2	Olympus	599
71 x 46	281	China	1	CR Kennedy	179
69 x 46	262	ns	1	Canon	179
66 x 49	246	China	2	CR Kennedy	249
68 x 57	311	Germany	1	Gerber Optical	465
67 x 52	293	Korea	2	Adeal	549
62 x 47	222	China	1	Olympus	349
45 x 42	221	ns	ns	Adeal	159
65 x 44	236	Japan	2	Hanimex	249
62 x 43	225	Philippines	1	CR Kennedy	519
73 x 46	315	China	2	Tasco	159
73 x 51	287	China	2	Haco	149
64 x 36	194	China	1	Kodak	229
80 x 74	372	China	2	Haco	549
63 x 30	174	Taiwan	1	Canon	299
75 x 34	139	Japan	2	Hanimex	99
60 x 31	218	Philippines	1	CR Kennedy	499
66 x 39	182	China	1	Kodak	349

Continued from page 27

On the other hand, for those who are usually happy with their shots or don't take a lot of photos, the compact camera is still a practical choice.

APS vs 35 mm

APS cameras are losing popularity, but they're usually smaller and lighter than 35 mm compacts and have some helpful features, such as almost foolproof film loading and a choice of three formats — the classic (C), which is similar to 35 mm, the wider (H) and the panorama (P) for those memorable holiday vistas.

Most APS cameras can also record some 'print quality improvement' (PQI) information on the film. This tells the printing machine about the conditions in which each frame was taken, which helps get the best quality when printing.

Despite this, picture quality is still slightly better with 35 mm compacts, but there's not much in it. If you're likely to want enlargements bigger than 12.5 x 18 cm, 35 mm would probably be a better option because it's less likely to show the grain in the film.

More than half of all processing labs are now APS-equipped, so getting your pictures developed shouldn't be a problem. However, the market for these cameras is shrinking and some manufacturers are moving their resources into the digital market.

As a general rule processing costs are lower with 35 mm film, but it pays to shop around for a lab that will give you a satisfactory mix of quality and cost, regardless of the format you're using.

All the APS cameras in our test underexposed the film in daylight conditions, which makes them inappropriate for use with slide film.

* Prices are recommended retail, as provided by manufacturers in November 2002. For 35 mm cameras it's the price for the date version where one is available as an option.

ns Not stated

(A) Failed our drop test: couldn't take photos after only one drop from half a metre onto a wooden bench. See What about the rest?, page 31, for more.

(B) Discontinued — the manufacturer says it's been replaced by the technically similar Zoom Mate 90S (\$179). (C) Can also add a comment.

1 Overall score

The overall score is a combination of picture quality and ease of use, weighted as follows:

- Picture quality: 70%.
- Ease of use: 30%.

2 Picture quality score

For picture quality we assessed the following:

- Optical quality (for example, picture sharpness, focus accuracy and distortion of straight lines): 55%.
- Flash performance (exposure accuracy, uniformity and red-eye removal): 20%.
- Viewfinder accuracy (is what you see through the viewfinder what you'll actually get in the photo?): 10%.
- Minimisation of disturbing effects (vignetting, flare, distortion and shutter delay): 15%.

3 Ease of use

Our panel assessed the following:

- Overall feel — bulk, weight, balance and ease of carrying: 10%.
- Preparation — loading film, batteries and setting time and date: 10%.
- Taking pictures — controls, warnings, gripping the camera without obstructing the flash, clarity of LCD screen and markings on the camera body, default settings, type of zoom and ease of framing a shot: 50%.
- Viewfinder: 15%.
- Film rewinding: 5%.
- Instructions: 10%.

4 Features and specs

See *Extra features and Specs*, page 30, for an explanation of these and of what the numbers in the columns mean.

Profiles

Models in the *What to buy* list are profiled in rank order. Prices are recommended retail, as provided by manufacturers in November 2002. For 35 mm

35 mm CAMERAS

MINOLTA RIVA ZOOM 160 DATE

Price: \$599

GOOD POINTS

- Very good picture quality.
- Easy to use.
- Large zoom range.
- Little shutter delay.
- Minimal disturbing effects (such as vignetting, flare, distortion and shutter delay).
- Excellent red-eye reduction.
- Focus interlock (the camera won't take a picture if the subject isn't in focus).

BAD POINTS

- Expensive.
- No close-up/macro setting.



PHOTOS: C&P

MINOLTA RIVA ZOOM 75W

Price: \$349

GOOD POINTS

- Very good picture quality.
- Minimal disturbing effects.
- 28 mm wide angle could be handy for indoor shots.
- Excellent red-eye reduction.
- Focus interlock.
- Close-up/macro setting.

BAD POINTS

- A bit expensive.



ROLLEI GIRO 70 WA

Price: \$169

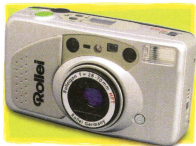
BEST BUY

GOOD POINTS

- Good picture quality.
- 28 mm wide angle could be handy for indoor shots.
- Excellent red-eye reduction.
- Focus interlock.
- Close-up/macro setting.

BAD POINTS

- Longish shutter delay.



Features they (almost) all have

- **Autofocus**, with an aiming point in the viewfinder, except the **CANON Sure Shot A1** and **FUJIFILM Nexia Q1**.
- **Zoom lens**, except the **CANON Sure Shot A1**, **MINOLTA AF50 Big Finder** and **FUJIFILM Nexia Q1**.
- **Half-press shutter release button** to hold focus.
- **Programmed automatic exposure control**, except the **FUJIFILM Nexia Q1**.
- **Built-in flash** that operates automatically if the light conditions require it. The auto flash can be turned off on all models except the **FUJIFILM Nexia Q1**, for situations where you want mood lighting.
- **Fill-in flash** helps to make the scene look more natural when the subject is less well lit than the background (for example, an indoor shot of a person in front of a window).
- **Flash interlock** stops the camera taking a picture if the flash isn't ready to fire.
- **Indication of correctly loaded film** (all

- 35 mm models; with APS models you simply drop the film into the camera and close the flap).
- **LCD screen** showing essential exposure information, and LCD frame counter.
- **Lithium battery**, except the **KYOCERA/YASHICA Zoomate 70**, **KONICA Z-up 90e**, **FUJIFILM Zoomdate 90S** (see footnote (B) in the table) and **MINOLTA AF50 Big Finder**, which use alkalines.
- **Battery check**.
- **Self-timer**, except the **FUJIFILM Nexia Q1**.
- **Tripod socket**, except the **FUJIFILM Nexia Q1**.

EXTRA FEATURES

The table on page 28 shows which cameras have these features/specs.

- **Red-eye reduction**: There's a number of systems designed to deal with red-eye — single pre-flash (SP), multiple pre-flashes (MP), a light beam (LB) or a flashing light beam (FLB) — and all seem to work to some extent to reduce

- this problem. Flashes that flip up and away from the lens are usually very effective. The higher the score in the table, the more effective was the red-eye reduction.
- **Date marking**: A tick in this column in the table indicates the camera has a version that can record the date and time a photo is taken. There may also be a slightly cheaper version without this feature. Some APS cameras and the 35 mm **CANON Sure Shot Zs55** and **RICOH R-ex 105z** can also add a comment, which is indicated by footnote (C).

SPECS

- **Focal length**: For 35 mm cameras, a focal length of 50 mm most closely represents what the human eye sees (40 mm for APS cameras). Anything smaller than this is called wide-angle: the smaller the number, the wider the angle of view and the more of the subject you can fit into your picture.

Higher focal lengths narrow the angle of

the price for the 'date' version when one is available.

APS CAMERAS



KODAK ADVANTIX F620

Price: \$229 **BEST BUY**

GOOD POINTS

- Reasonably cheap for an APS camera.
- Good picture quality.
- Very good minimisation of disturbing effects.

BAD POINTS

- Longish shutter delay.
- No close-up/macro setting.



MINOLTA WEATHERMATIC ZOOM

Price: \$549

GOOD POINTS

- Easy to use.
- Good around water.
- Acceptable minimisation of disturbing effects.
- Reasonable red-eye reduction.

BAD POINTS

- Expensive.
- The heaviest APS camera by quite a margin.
- Lower than average APS viewfinder accuracy.
- No close-up/macro setting.

view and make distant subjects appear closer (telephoto). A zoom lens allows you to vary the focal length and gives much more versatility in fitting a subject into your photo.

Extreme focal lengths (both high and low) tend to increase the distortion of a photo: the lens makes straight lines appear curved, particularly towards the edges of the picture.

- Film speed range:** This column in the table tells you which film speeds the camera can adjust to. The higher the ISO number the more light-sensitive the film is, allowing you to capture fast-moving objects or to take pictures in poor light.

Most APS models can adapt to a wide range of film speeds. However, currently only 100, 200 and 400 film is available in Australia.

- Flash range:** This is the distance in metres at which the flash will work effectively. Too close and the subject will be too brightly lit, too far away and there won't be enough light to expose the film correctly.

Zoom lenses affect the flash range because they change the effective maximum aperture of the lens, which varies the amount of light reaching the film. The numbers in this column in the table are for widest angle (W) and maximum telephoto (T).

- Shutter delay:** The first number in the table is the time it takes the camera to open the shutter (take a picture) after you press the shutter release button. The second is the time it takes to open the shutter if the shutter release button is first half depressed, causing the camera to engage its autofocus mechanism. In either case a delay of half a second or more is considered too slow, making it very difficult to anticipate the action — which means for the former case, all but the MINOLTA Riva Zoom 70, Riva Zoom 160 Date and AF50 Big Finder aren't fast enough.

WHAT ABOUT THE REST?

All the cameras in this test can produce acceptable photos.

- The FUJIFILM Zoom Date 90 would have been a Best Buy, but it's been replaced by the FUJIFILM Zoom Date 90s. The manufacturer tells us they're technically similar, but there are changes to the body and it uses alkaline batteries.

- If small size and weight are important you'd probably be better off with an APS camera, but the 35 mm FUJIFILM Zoom Date 1300 is of similar size. The FUJIFILM Nexia Q1, CANON Elph LT260 and KODAK Advantix T700 are the lightest in the test.

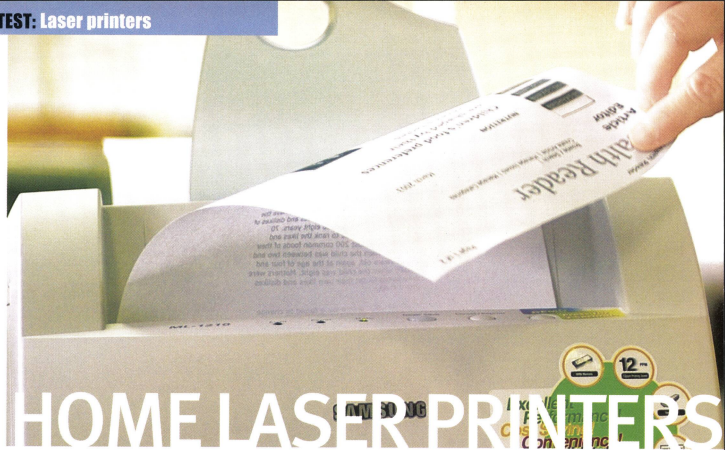
- For sports and other events where you're far from the action, the KYOCERA/YASHICA Zoomate 165SE, OLYMPUS μ (mju)-II Zoom 170 and SAMSUNG Vega 170 all have long lenses.

- We were unimpressed with the price of the 35 mm CONTAX TVS 111 (\$2100) and LEICA Minilux Zoom (\$1995) when we reported on them in March 2002, and nothing has happened to change our opinion. Their picture quality is good, but they score at or near the bottom of the models in this test for ease of use.

- The FUJIFILM Nexia Q1 (below) also isn't too impressive for ease of use and lacks a lot of features (see far left), but at \$99 it's a very cheap option and its quirky looks could be appealing.



- The CANON Sure Shot Z155 and KYOCERA/YASHICA Zoomate 90W failed our drop test. Neither could take photos after only one drop from half a metre onto a wooden bench. We tested a second sample with similar results, so they're probably not the best choice for rugged use.



IN A NUTSHELL

- The **SAMSUNG ML 1210**'s print quality is equal to that of more expensive printers.
- Check what's in the box. Of the printers we bought, only the **LEXMARK** came with a parallel cable, and the **CANON Laser Shot LBP-1120** had a European power cord.
- Lasers are still good value for cost per page.

The cost of computer printers has been falling for some time — as a result laser printers are now available for less than \$500. We looked at nine of the cheaper models on the market to see if they can produce acceptable quality and to check how easy they are to set up and use. Overall we were pleasantly surprised.

Print quality

Inkjet printers have been the dominant force on the domestic front because they're generally cheaper to buy than laser printers and offer colour printing. However, if your needs only run to printing text or the odd web page for reference purposes, a laser printer could be a better option.

Print quality for plain text will probably be better than an inkjet, even from a cheap laser, but some inkjets can match them if higher-quality print settings are used.

The **SAMSUNG ML 1210** surprised us with its quality when reproducing our test spreadsheet, which includes tables, background tones and textures as well as graphs. Our expert panel thought it was as good as could be expected from a more upmarket laser printer.

Getting connected

Until pretty recently, the only way to connect a printer to your computer was via the parallel port. Universal serial bus (USB) is now available on most new computers and provides faster speeds for transferring information

between the computer and all sorts of devices.

All the printers except the **CANON Laser Shot LBP-1120** and **HP LaserJet 1000** can be connected using the parallel port on your computer. Most also have the ability to connect using a USB port if there is one, but the **BROTHER HL-1230** is parallel only.

The **CANON** and **HP** are USB-only printers. The **HP** has a port that looks like a parallel port and came with a special converter cable, but it requires a USB port on the computer.

The **XEROX Phaser 3110** has provision for both USB and parallel, but we had a lot of trouble getting the USB connection to work. Fuji Xerox told us this can happen with some operating systems and said a call to its customer care section should solve the problem.

At laser speed

The type of port used will have an effect on the speed of printing. We tested the parallel port wherever possible because this is the slowest (and therefore worst case) you can expect from the printer. Connecting via USB you should get faster print times. Our results were:

- The **HP** took around 13 seconds to print the first page of our test letter and can pump out about 10 pages per minute (six seconds per page) for subsequent pages.
- The **CANON** was almost as fast, taking 18 seconds for the first page and matching the **HP** for subsequent pages.
- The **BROTHER** took 29 seconds for the first page, but was a second a page faster for subsequent pages.

WHAT TO BUY

HP LaserJet 1000	\$499
SAMSUNG ML 1210	\$399
CANON Laser Shot LBP-1120	\$499
LEXMARK E210	\$479

The HP has the best overall and print speed scores and its print quality and ease of use are equal second best. However, it has the second highest cost per page (see *Running costs*, below, for more detail).

Both the **CANON** and **SAMSUNG** are cheaper to run. The **SAMSUNG** is the easiest to use and has the highest score for print quality, but it's among the slowest to warm up and print using a parallel connection, though as fast as or faster than the other two if you use USB. Definitely good value at this price. The **CANON** can match the **HP** for speed in some areas and has a lower price per page. The **LEXMARK** is easy to set up and has good print quality but comparatively high running costs.

Note that you won't be able to use the **HP** or **CANON** unless your computer has a USB port (see *Getting connected*, below left).

Cheap black and white printing.

■ Using its parallel connection the **MINOLTA QMS PagePro 1200W** took 25 seconds for the first page, but was the slowest for the rest at 10 seconds per page. Its performance connected via USB improved to 20 seconds for the first page and five for each subsequent page.

■ Using parallel, the other printers that can use either port took around 40 seconds to print the first page and were about as fast as the **HP** for subsequent pages, except the **OKI Okipage 8Z**, which took eight seconds per page, and the **PANASONIC KX-P7100** at a very fast four seconds per page.

■ The results are quite different for those printers using USB. The **SAMSUNG** was fastest at 15 seconds for the first page (which is only slightly slower than the **HP**) and five seconds for subsequent pages. The others also improved their initial print times significantly. Generally, subsequent pages take about the same time regardless of the connection type, but there was some improvement with large files, such as the spreadsheet we used for part of our testing. However, the **OKI** and **PANASONIC** both had slightly slower times for subsequent pages of the larger file when using USB.

If you're likely to print on and off during the day but have longish gaps between each printing job, the time it takes the printer to warm up becomes pretty important.

We measured the time it takes for each printer warm up from cold after it's been turned off for some time. Then we did the same measurement from 'sleep' or 'standby' mode. The **HP** and **CANON** took only 14

seconds to warm up from a cold start, the **BROTHER** and **MINOLTA 24** and 20 seconds respectively. The others all took 30 seconds or more. The **HP** took only four seconds to begin printing from standby and the **CANON 10** seconds. The rest were around a second faster or slower than their cold start times, suggesting there's not much point in leaving them in standby mode.

Running costs

All the printers quote an estimated number of pages per toner cartridge based on a standard output of 5% ink coverage of an A4 page. We used this figure to estimate the cost per page based on the price for a standard cartridge.

These figures are only useful as a guide. Your usage is likely to be greater than 5% coverage if you're doing anything more than a fairly short business letter. Printing spreadsheets or web pages with images is likely to use a lot more ink.

The very best economy we've seen for inkjet printers in recent tests is around six to seven cents per page, but the majority cost around 11 cents and some as much as 20 cents. In comparison, the most costly in this test are the **LEXMARK** and **HP** at 7.1 and 6.8 cents per page respectively. The least expensive are the **OKI**, **PANASONIC** and **BROTHER** at 2.5, 2.7 and 2.8 cents per page respectively.

For the **BROTHER**, **MINOLTA**, **PANASONIC** and **OKI** (whose drum and toner cartridge aren't combined) these running costs don't include the price of a new drum

Continued on page 35

Brand / model (in rank order)	PERFORMANCE			COMPONENTS OF PRINTING SCORE			4 Printing cost (cents / page, toner only)	5 Pages per toner cartridge (claimed)
	1 Overall score (%)	2 Ease of use score (%)	3 Printing score (%)	3 Warm-up speed score (%)	3 Print speed score (% parallel / USB)	3 Print quality score (%)		
HP LaserJet 1000	81	83	78	87	na / 80	75	6.8	2500
SAMSUNG ML 1210	80	85	68	43	50 / 80	88	5.1	2500 (A)
CANON Laser Shot LBP-1120	77	82	72	81	na / 71	70	4.8	2500
LEXMARK E210	76	83	63	46	52 / 75	75	7.1	2000 (A)
BROTHER HL-1230	72	78	65	64	65 / na	65	2.8	3000
PANASONIC KX-P7100	72	80	61	47	59 / 72	65	2.7	4000 (A)
MINOLTA QMS PagePro 1200W	65	70	55	69	44 / 72	60	3.9	3000 (A)
XEROX Phaser 3110	65	63	62	45	50 / 74	75	5.5	3000
OKI Okipage 8Z	60	65	52	49	56 / 71	50	2.5	1500 (A)

Profiles

Models in the *What to buy* list are profiled in rank order. Prices are recommended retail, as provided by the manufacturers in January 2003.

HP LASERJET 1000

(Runs via USB port only.)

Price: \$499

GOOD POINTS

- Quick to warm up, particularly from standby.
- Quick to print.
- Very good print quality for a text document.
- Good print quality for a detailed spreadsheet.
- Data cable supplied.
- Paper tray has a large capacity.
- Easy to install.

BAD POINTS

- Toner running costs are high.

SAMSUNG ML 1210

Price: \$399 **BEST BUY**

GOOD POINTS

- Very good print quality for a text document.
- Print quality for a detailed spreadsheet is excellent.
- Very easy to install.
- Quick to print when connected via USB.

BAD POINTS

- Print speed only average for parallel.
- The toner cartridge supplied with the printer has only 40% the capacity of a normal cartridge.
- No data cable supplied.

CANON LASER SHOT LBP-1120

(Runs via USB port only.)

Price: \$499

GOOD POINTS

- Quick to warm up.
- Quick to print.
- Very good print quality for a text document.
- Print quality for a detailed spreadsheet is OK.
- Fairly easy to install.

BAD POINTS

- Although the one we bought came with a data cable, **CANON** says this isn't normal.

LEXMARK E210

Price: \$479

GOOD POINTS

- Very good print quality for a text document.
- Good print quality for a detailed spreadsheet.
- Reasonably quick for USB printing.
- Data cable supplied (parallel).
- Very easy to install.

BAD POINTS

- Parallel print speed only average.
- The toner cartridge supplied with the printer has only 50% the capacity of a normal cartridge.
- Toner running costs are high.



HP

Samsung



Canon



Lexmark



ANTHONY SARRIS

UNUSUAL WARRANTY

The **HP** we bought has this warranty statement: "Hewlett-Packard specifically disclaims the implied warranty of merchantability and fitness for a particular purpose."

This appears to breach the Trade Practices Act in Australia and could be misleading. We reported it to the ACCC and contacted **HP**, which assures us it abides by Australian law and is looking into how the statement came to be in the box.

Cost of new toner cartridge (\$)	6 Paper tray capacity	Space needed (H x W x D, cm)*	Weight (kg)**	System requirements	Warranty (years)	Origin	Manufacturer / distributor	Price (\$†)
2.75 (B)	250	35 x 61 x 75	8.2	Windows 98/Me/2000/XP	1 (C)	China	Recognition PR	499
3.50 (B)	140	46 x 94 x 78	6.6	Windows 95/98/Me/2000/NT4.0, Linux Red Hat 6.0+, Mac OS 8.0+	2	Korea	Samsung	399
3.00 (B)	120	50 x 48 x 70	7.1	Windows 98/Me/2000/XP	1 (D)	China	Canon	499
3.15 (B)	140	46 x 94 x 78	6.8	Windows 95/98/Me/2000/XP/NT4.0, Linux Red Hat 6.1+	1 (E)	China	Lexmark	479
3.65	250	35 x 46 x 100	9.7	Windows 95/98/Me/2000/XP/NT4.0, Macintosh (iMac/G3/G4)	1	China	Brother	499
3.00	250	40 x 44 x 95	9.8	Windows 95/98/Me/2000/NT4.0	1	China	Panasonic	499
3.00	140	47 x 58 x 68	7.6	Windows 95/98/Me/2000/XP/NT4.0	3	China	Minolta QMS	499
3.00 (B)	140	46 x 94 x 78	6.7	Windows 95/98/Me/2000/XP/NT4.0, Linux	3 (F)	Korea	Fuji Xerox	495
2.90	90	41 x 72 x 71	4.4	Windows 3.1x/95/98/2000/NT4.0	1 (C)	Thailand	IPL Datron	515

From page 33

because we calculate that you'd have to print more than 10 pages a day for over three years to wear one out. Most people would be more likely to be considering upgrading their printer by this time. However, if you do include a new drum their price per page will only rise by a cent or so over this time.

The CANON, HP, LEXMARK, SAMSUNG and XEROX combine the drum with the toner, so you automatically change both every time you put in a new toner cartridge.

Low tones

LEXMARK, MINOLTA, OKI, PANASONIC and SAMSUNG all supplied a toner cartridge that's only around half the capacity of a normal one. This is an inconvenience and likely to increase your running costs in the short term.

If you're considering one of these printers and expect to be printing large volumes in the first year, we suggest you try to negotiate a discount on a replacement toner cartridge when you buy the printer.

* Includes space for paper handling and ventilation gaps.

** Includes all trays and the toner cartridge.

† Prices are recommended retail, as provided by manufacturers in January 2003.

(A) Original cartridge supplied with the printer has a lower capacity.

(B) Toner and drum are combined.

(C) Must be returned to the manufacturer for repair.

(D) With optional further two years for \$75.

(E) You have the choice of exchanging a faulty printer with another, of "as good or better condition", with overnight delivery; or returning it and having it repaired within two days of receipt. Extended warranty available at a cost.

(F) "Like for like" replacement warranty.

1 Overall score

■ Performance and ease of use each made up half of the overall score.

2 Ease of use score

The following aspects were all rated equally:

- Setting up the printer.
- Quality of the manual/CD.
- Installing paper.
- Installing the toner cartridge.
- Removing printouts.
- Reading the display and using controls.

3 Printing score

■ Warm-up speed: 10%.

■ Print speed: 40%.

■ Print quality: 50%.

4 Printing cost

This is the cost per page in cents, based on the toner capacity as stated by the manufacturer. (For more information see *Running costs*, page 33.)

5 Number of pages per toner cartridge

As claimed by manufacturers, based on 5% ink coverage of an A4 page. Also see *Low tones*, left.

6 Paper tray capacity

We measured this using standard 80 gsm paper.

What to look for

- Be careful to include all the trays and ventilation space recommended when measuring where you'll fit your printer. Printers that look small can require a lot of space for trays, making them as difficult to fit in small spaces as the bulkier ones with built-in trays.
- The LEXMARK was the only model to come with a parallel cable, and the HP and XEROX supply a USB cable. You can expect to pay around \$10 to \$15 for a cable.
- The power cable supplied with the CANON had a European plug. This was replaced by the retailer, but check that all the parts in the box are of the right type before you leave the shop. This isn't as inconvenient as it sounds, because most printers will come with a list of things the box should contain.
- Only the PANASONIC can print on both sides of the paper (called duplex printing) without the need for you to manually turn the paper

over and feed it back into the printer. The latter is sometimes called "manual duplex", but you need to be very careful not to damage the page in any way or it can cause a paper jam. SAMSUNG suggests you don't do it.

FEATURES THEY ALL HAVE

- Can be connected to a network (you have to buy a network card for the MINOLTA and BROTHER).
- Print on A4, B5, legal and letter-sized paper (none prints A3). They also print envelopes, labels (except the MINOLTA), transparencies and postcards, but the sizes vary.
- A manual feed slot (for that one-off job).
- A "toner save" setting that reduces print quality and extends toner life. (The CANON and OKI don't have a specific setting, but you can manually reduce their quality setting).

Driver: 1, pedestrian: 0



Most of the small four-wheel drives tested offer good crash protection for both driver and passenger — but you don't want to be a pedestrian who gets hit by one.

The latest round of high-speed crash tests released by the Australian New Car Assessment Program (ANCAP) looked at a number of small four-wheel-drives (so-called soft-rovers).

Thanks to good safety design, including standard dual airbags, seven of the nine models tested scored well for driver and passenger protection.

But only the HONDA CR-V provided at least some pedestrian protection. Its score of 52% is one of the highest achieved by any car model. All other models fared quite poorly in the pedestrian impact tests, with the SUZUKI Grand Vitara being the worst of the lot — scoring 0%. It's clearly time for manufacturers to give more thought to the safety of pedestrians struck by a car.

The pedestrian impact test estimates injuries to a pedestrian struck by the car at 40 km/h. In a number of test runs, crash test dummies resembling an adult and a child are fitted with sensors and hit by different impact points across the front of the car.

While the initial contact is with the legs, the upper body and head would bend over in such an accident and hit the bonnet or windscreen. Any damage to the head and upper and lower legs is assessed, but the score isn't part of the car's overall rating.

WHAT'S TESTED?

The driver/passenger test consists of two crashes:

■ **Offset crash:** The car is crashed at 64 km/h into a fixed barrier with a crushable aluminium face. Only 40% of the car's front (driver's side) hits the barrier.

■ **Side-impact crash:** A 950 kg trolley is run into the driver's side of the stationary car at 50 km/h. This test simulates a fairly small car striking the driver's door. Test models with a relatively high seating position, such as four-wheel drives, can be expected to perform well in this test.

While side airbags are available on some of the tested European cars, none of the equivalent Australian

models comes with them. Side airbags are only available on the luxury versions of a few models: SUBARU Forester XS Luxury Pack, MAZDA Tribute Luxury and FORD Escape Limited.

WHY'S ASSESSED?

The overall rating (see the table) is based on the following assessments from the above tests:

- The car's **structure**: for example, does the passenger compartment keep its shape, and how far are the steering column and pedals pushed inwards?
- The car's **restraint system**: for example, do the driver and passenger hit any hard parts of the car?
- **Injury risks**, using crash test dummies fitted with sensors that measure forces and movements.

Crash test results are only comparable for vehicles of similar weight — as a guide, cars have to be within 230 kg of each other.

MORE ONLINE

On CHOICE Online you'll find detailed results from this latest round of ANCAP crash testing, as well as the results for all the cars crashed since the start of the program. Go to www.choice.com.au and type 'ANCAP' in the search box.

Make / model / year / engine size (airbags) ranked in order of overall rating

Make / model / year / engine size (airbags)	Overall rating (%)	Pedestrian rating (%)	Weight (kg)
SUBARU Forester X, 2002 on, 2.5 L (dual)	85	23	1420
HONDA CR-V, 2002 on, 2.0 L (dual) (A)	78	52	1500
NISSAN X-Trail ST, 2001 on, 2.5 L (dual) (A)	74	29	1440
TOYOTA RAV4 Edge, 12/2002 on, 2.0 L (dual)	74	28	1380
FORD Escape, 2001 on, 3.0 L (dual) (B)	73	(B)	1570
HYUNDAI Santa Fe GL, 2002 on, 2.0 L (dual) (A)	73	11	1790
MAZDA Tribute Limited, 2001 on, 3.0 L (dual)	73	11	1580
SUZUKI Grand Vitara, 2002 on, 2.7 L (dual) (A)	67	0	1640
LAND ROVER Freelander, 7/2002 on, 2.0 L diesel (dual) (A)	59	21	1490

Source: ANCAP. The Australian New Car Assessment Program (ANCAP) is funded by Australian and New Zealand State and Federal Governments and Automobile Clubs.

(A) The European model was used for at least one test, conducted by EuroNCAP. Australian specifications (such as engine size) may vary and

models sold in Australia might provide slightly different levels of protection from those described.

(B) This model wasn't tested separately. However, it's similar to the Mazda Tribute, and can be expected to provide similar crashworthiness. But due to different body panels, the Tribute's pedestrian rating doesn't apply to the Escape.

NO FAN — no fun

We tested 10 electric convection heaters (including two identical models) between \$59 and \$259, and with a maximum heating capacity of 2000 W. This makes them suitable for a large bedroom or small living area, depending on the climate you live in and how well insulated your house is.

Compared to our last test in 1999, we found two new designs:

■ The **ARLEC MTH1** and **IXL** models have a 'micathermic' heating element, based on the mineral mica. They're claimed to provide fast heat due to the large surface area of the heating element.

■ The **DELONGHI** is about twice as long as the other heaters, but only 28 cm high (see page 38). The larger hot air outlet close to the floor is supposed to provide better heat distribution.

However, none of these three models has a fan, which is probably the main reason why all of them did comparatively badly in some of our heating tests (see note 2, page 39, for details). While they provide heat more quickly than oil-filled column heaters, they were clearly slower than the fan-assisted convection heaters to heat up our test room, and provided worse heat distribution (see *Cold feet, hot head?*, page 39).

SAFETY PROBLEMS

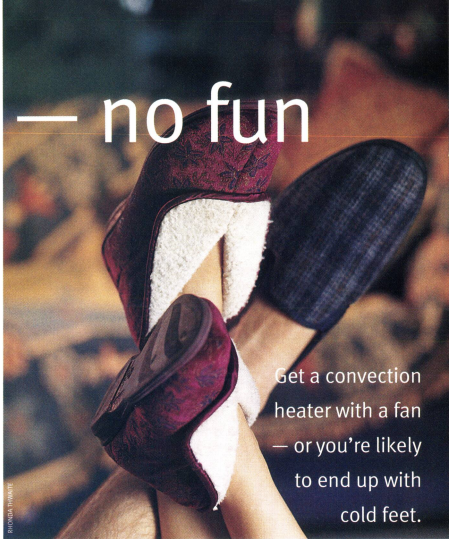
While all the models passed electrical safety and surface temperature tests, we found problems in some of our other safety tests:

■ **Tilt test:** This requires a heater not to topple over when tilted to an angle of up to 15°. The **DIMPLEX**, **EWT** and **IXL** were less stable than the other models and fell over in this test.

More importantly, we also checked whether the heaters keep operating once they've tipped over (even if they pass the tilt test they could still fall over in other circumstances). If they do, a person who fell onto the heater and couldn't roll away — for example, a toddler or an elderly person — could be injured. The **ARLEC HC2000S**, **DIMPLEX**, **GOLDAIR** and **SUNAIR** were switched off relatively quickly by their thermal cutouts, the **OMEGA** by its tilt switch.

However, the **ARLEC MTH1**, **DELONGHI**, **IXL** and **MISTRAL** kept heating or cycling on and off while on their backs. The **EWT** took three minutes until its thermal cutout switched it off. So these models may not be the best choice if a member of your household could be at risk in such an accident.

This problem could easily be avoided by having a tilt switch that turns the heater off when it's tipped over. In this test, only the **OMEGA** has one.



Get a convection heater with a fan — or you're likely to end up with cold feet.

■ **Towel test:** A towel was draped over the heater while it was turned to its highest heat and fan settings for 30 minutes, simulating what could happen if a towel or clothing were accidentally dropped on it.

Ideally, a thermal cutout (on all the tested models except the **ARLEC MTH1**) should protect the heater from being damaged and the towel from catching fire.

None of the heaters scorched or burnt the towel, which is good news for safety. However, the **ARLEC MTH1** and **IXL** overheated and — while remaining functional — sustained some damage to their plastic casings.

The fan on the **SUNAIR** didn't work any more after this test. While it's identical to the **ARLEC HC2000S**, we only tested the **SUNAIR**, and so can't be sure the **ARLEC** would have the same problem.

In a second test, we blocked the heaters' air inlets (this could happen when, for example, the heater stands close to, and sucks in, a curtain). No damage was caused either to the heater or the blocking fabric.

IN A NUTSHELL

■ Models without a fan are much slower to heat up a room, and don't distribute the heat as well as models with a fan.

■ Only one of the tested models has a tilt switch that turns the heater off when it falls over. We think this is an important safety feature that should be incorporated into all heaters.

WHAT TO BUY

DIMPLEX DX20F	\$84
EWT 2577	\$99
MISTRAL MCVH2000	\$80
OMEGA OCH2072	\$99

PERFORMANCE

Brand / model (in rank order)	1 Overall score (%)	2 Heating score (%)	3 Ease of use score (%)	4 Safety tests	5 Noise
DIMPLEX DX20f	75	84	54	Fell over in tilt test	Medium
EW2577	75	84	54	Fell over in tilt test; took three minutes to turn off when on its back.	Noisier
MISTRAL MCVH2000 (A)	71	75	62	Kept heating when on its back.	Quieter
OMEGA OCH2072	71	80	50	OK	Noisier
GOLDAIR 8600	67	73	54	OK	Noisier
ARLEC HC2000S (B)	65	66	62	(B)	Quieter
SUNAIR HC-2000 (B)	65	66	62	Fan broke in towel test. (B)	Quieter
ARLEC MTH1 (C)	56	47	76	Kept heating when on its back; plastic housing damaged in towel test.	No fan
IXL 72405 (D)	55	49	70	Fell over in tilt test; kept heating when on its back; plastic housing damaged in towel test.	No fan
DELONGHI BBH100	52	54	48	Kept heating when on its back.	No fan

Profiles

Models in the *What to buy* list are profiled in rank order. Prices shown are recommended retail, as provided by manufacturers in February 2003.

The **DIMPLEX DX20f** (\$84) is fast to heat up a room, and its thermostat keeps the temperature very stable. It doesn't have a tilt switch to turn it off if it falls over, but while it did fall over in our tilt test, its thermal cutout switched it off when tipped on its back.

The **EW2577** (\$99) is fast to heat up a room, and its thermostat keeps the temperature very stable. It doesn't have a tilt switch. It fell over in our tilt test, and kept heating for about three minutes while on its back before its thermal cutout switched it off. So it may not be the best choice if there's a toddler or elderly person living in your household who could fall on it.

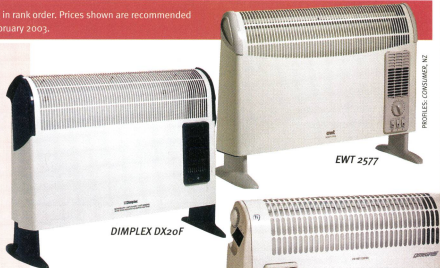
The thermostat on the **MISTRAL MCVH2000** (\$80) keeps the temperature very stable. However, it doesn't have a tilt switch and kept cycling on and off while on its back (its thermal cutout didn't switch it off). So it too may not be the best choice if there's a toddler or elderly person living in your household.

The **OMEGA OCH2072** (\$99) distributed the heat the most evenly in our test room, and its thermostat keeps the temperature very stable. It's the only model in our test with a tilt switch.

What about the rest?

■ The **ARLEC MTH1**, **DELONGHI** and **IXL** don't have a fan and distributed the hot air much more slowly and not as evenly as the models with a fan.

■ The **ARLEC HC2000S**, **GOLDAIR** and **SUNAIR** were slower to raise the temperature in our test room by 10°C than the models in the *What to buy* list.



The Delonghi's long hot-air outlet close to the floor is supposed to distribute the heat better, but the model has no fan and so provided worse heat distribution than most of the other models.

MORE ONLINE

If you have access to the internet, there's more information on all things heating on our website. Go to www.choice.com.au and type 'heater' in the search box. Among other articles you'll find:

- **Your heating options** for info on different fuels, heater types and our heating capacity calculator.
- **Electric heater database** for specifications, features and prices of portable electric heaters available in Australia.

SPECIFICATIONS

Thermal cutout	Tilt switch	Cord storage	Frost watch	Dimensions (L x H x D; mm)*	Weight (kg)	Warranty (years)	Origin	Manufacturer / distributor	Price (\$) **
✓			✓	605 x 450 x 120	4.0	2	UK	Hagemeyer	84
✓			✓	635 x 450 x 120	4.1	2	Ireland	Hagemeyer	99
✓			✓	670 x 410 x 100	4.8	2	China	Mistral	80
✓	✓			660 x 425 x 110	4.6	2	China	Omega Smeig	99
✓			✓	700 x 445 x 105	5.2	1	China	Kambrook	90
✓				670 x 415 x 100	5.3	1	China	Arlec	70
✓				670 x 415 x 100	5.3	1	China	GAF Control	59
		✓		665 x 620 x 120	7.0	2	China	Arlec	150
✓		✓		635 x 660 x 145	7.8	2	China	IXL Appliances	259
✓			✓	1200 x 280 x 100	4.8	1	Italy	Parex Industries	169

* Rounded to the nearest 5 mm and 100 g.

** Recommended retail price according to manufacturer information in February 2003.

(A) Also available with a timer (MCVH2000T, \$100).

(B) These models are identical. Only the Sunair was tested.

(C) Also available with a timer (MTH1T, \$179).

(D) Also available with a timer (72410, \$279).

1 Overall score

This is a combination of the heating (70%) and ease of use (30%) scores.

2 Heating score

The heaters were assessed in a thermal comfort lab — a room measuring 4.9 m by 3.5 m with an insulated ceiling (height 2.4 m), which sits within a temperature-controlled outer room that provides a constant outside temperature. We tested the following:

- **Heating speed:** How long does the heater take to raise the room temperature by 5°C and 10°C?
- **Heat distribution:** How evenly does the heater heat the room?
- **Thermostat performance:** How well does the heater's thermostat maintain a selected room temperature?

3 Ease of use score

We assessed the following:

- Use of controls.
- Visibility and clarity of markings.
- Ease of cleaning.
- Cord storage.
- Mobility on carpet.

4 Safety tests

These included a tilt test and a towel test. See *Safety problems*, page 37, for details.

5 Noise

Without the fan operating, convection heaters are very quiet. We measured the fan noise 1 m in front of the heater, and 1 m up.

The noisier models in our test may impact on a conversation or TV sound. However, you're likely to use the fan only for short periods at a time — to quickly heat up your room initially and then for a few minutes every now and then to break up the layers of air and distribute the heat. So we don't think noise is a big problem with this type of heater.

6 Features

See *What to look for*, right, for details.

What to look for

To find out what fuel, heater type and heating capacity are best to meet your needs, see *More online*, below left.

If an electric convection heater is for you, look for the following (see the table for which model has which feature):

■ **Thermostat:** This maintains a desired average room temperature (as long as it's within the heater's capacity), and should have a control that's easy to read and set. All the tested models have one.

■ **Number of heat settings:** The more settings, the more flexibility you have to cope with different heating requirements.

■ **A fan** should be a must, as it allows for much quicker and more even heat distribution. While it can be noisy, you're likely only to use it for a relatively short period at a time (see note 5, left).

■ **A thermal cutout** prevents the heater from overheating. It may or may not work when the heater has tipped over.

■ **A tilt switch** turns the heater off when it's tipped over (see *Safety problems*, page 37).

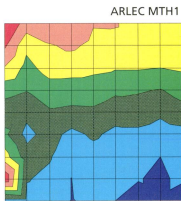
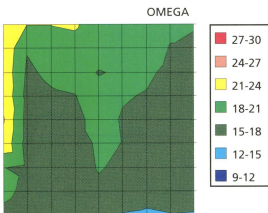
■ **Cord storage:** This allows you to neatly stow the cord when the heater's not in use.

■ **Frost watch:** This is claimed to maintain a temperature of about 5°C if the thermostat is left on its lowest setting, avoiding frost. We didn't test this feature but it's a good idea for colder climates.

Cold feet, hot head?

These heat distribution charts clearly illustrate the impact a fan has on the level of comfort provided by a heater. For example, the **OMEGA** (right) with its fan switched on achieved quite even heat distribution with almost no particularly cold or hot spots.

The **ARLEC MTH1** (far right), on the other hand, is one of the models that doesn't have a fan and couldn't break up the layering of air (stratification) from quite cold close to the floor and at sitting height, to very warm areas just below the ceiling, where it's fairly useless.



TVs for any room

Be it your main TV or a second (or third) for another room in the house, we've found some 51 cm models that should please everyone.



IN A NUTSHELL

- There are some new players in the TV market, as well as the return of an old name, **RANK ARENA** — we look at how they compare to some established brands.
- How 'flat' is flat? Many of the claimed flat-screen models were decidedly curved in comparison with the genuine or 'pure' flat screens.

This size of TV is still the biggest-selling on the market. It's a good size for a smaller living room or as a second TV in another room. A good guide to viewing distance is five times the diagonal screen size, so in the case of 51 cm TVs, around two and a half metres from the set.

WOULD YOU LIKE A FLAT SCREEN WITH THAT?

Only half the TVs in the test had genuinely flat screens — the **AKAI**, **NEC**, **PHILIPS**, **RANK ARENA**, **SAMSUNG** and **SANYO**. These are often called 'pure flat' by manufacturers. The rest have screens that are curved to some degree, even though their packaging claims they're flat. While they're less curved than they used to be, we still think it's stretching the truth to call them flat.

The genuinely flat screens show fewer reflections of objects around the TV, including light sources such as windows and room lighting. Flat screen or not, for better viewing try to make sure the TV is positioned so as to minimise reflections from bright light sources.

The other advantage of a flat screen is that you can view the TV from a wider angle without seeing a distorted picture.

A genuinely flat screen isn't necessarily a guarantee of better picture quality overall, although in this particular test five of the six models that have one scored well for picture quality.

What to look for

The three most important things to assess when buying a TV are picture quality, sound quality and ease of use. Then look for the features that are important to you.

■ **Picture quality:** Watch the set for a while in the shop, looking at all the available channels so you see a variety of images. You may need to adjust the picture controls (colour, contrast, brightness and sharpness) if the image is too bright, too dull, lacking in colour or the colours are unnaturally strong. Ask the salesperson for help if you're unsure. If you find a control needs to be set to maximum to get the best picture, be wary — you won't be able to adjust it as required when the TV ages.

If possible, find a 'talking head' to watch, such as a presenter. This lets you see how natural the skin tone is, and the hair will allow you to judge how well fine details are reproduced.

Look at all areas of the screen, not just the centre. Make sure the image isn't blurred or distorted in the centre or the corners.

■ **Sound quality:** A shop isn't the best environment for checking sound quality, as the ambient noise in the store can mask some undesirable sounds. Even so, turn up the volume and listen for any noticeable distortion. Also check the position of the speakers: some sets have them facing out from the sides of the TV (on all the models in this test the speakers face

WHAT TO BUY

PHILIPS 21PT2302/79R	\$749
SANYO CP21AF2	\$529
RANK ARENA RK-21F1	\$549
SAMSUNG CB-21K2	\$499

HOW RELIABLE HAVE SUBSCRIBERS FOUND THEM?

We asked a group of subscribers whether their TV had needed repair over the previous 12 months, and whether they'd buy the same brand again. The graphs on the right show the results for TVs of all sizes; the size doesn't seem to make a difference to reliability.

Analysis was limited to brands with more than 100 responses (the exact number is in brackets) and with at least 10 sets bought in each of the previous eight years.

Just 8% of TVs had needed repair in the previous 12 months, with subscribers reporting the following problems significantly more often than average for the following brands (for TVs up to three years old):

- Picture: **AWA** (23%), **AKAI** (12%), **MITSUBISHI** (12%), **TEAC** (11%).
- Sound: **AWA** (18%), **PHILIPS** (6%), **TEAC** (6%).
- Remote control: **AKAI** (10%), **TEAC** (7%).
- Tuner: **AWA** (9%), **AKAI** (4%).

PERCENTAGE NOT NEEDING REPAIR

(Differences of more than 6% are meaningful)

Panasonic/National (4334)	97
Sony (4546)	96
Sharp (1761)	94
Hitachi (285)	93
NEC (1795)	93
Sanyo (871)	93
JVC (418)	92
Mitsubishi (1029)	91
Philips (2034)	90
Samsung (1044)	88
LG/Goldstar (361)	87
Palsonic (506)	87
Akai (1345)	85
Toshiba (190)	85
AWA (260)	83
Blaupunkt (163)	83
Teac (1039)	80

PERCENTAGE WHO'D BUY THE SAME BRAND AGAIN

Panasonic/National (4363)	98
Sony (4607)	98
JVC (422)	95
Sanyo (888)	94
Sharp (1762)	94
Mitsubishi (1007)	93
Hitachi (285)	92
LG/Goldstar (361)	92
NEC (1810)	91
Philips (2039)	90
Toshiba (181)	87
Samsung (1045)	85
Akai (1341)	84
Blaupunkt (160)	84
AWA (251)	77
Palsonic (507)	77
Teac (1042)	75

the front), which could muffle the sound if you put it in a cabinet.

Ease of use: Play with the controls, especially the remote, and make sure the more commonly used buttons (volume, channel selector, standby and mute) are prominently positioned and easy to operate. Ideally, these buttons should be a different shape or size from the rest so you can locate them easily by touch only.

A good instruction manual is invaluable, but usually not common, though fortunately in this test we found all except the **RANK ARENA** and **RCA** to be adequate. Ask to see it, and check that it's well written and easy to read. Diagrams should clearly show the location and functions for all the controls, and the steps should be clear and easy to follow.

Features all the tested models have

- Picture controls for adjusting contrast, brightness, colour and sharpness.
- NTSC-compatible input — you can play videos formatted for the US colour picture system.
- Mute button.
- Automatic channel tuning, manual tuning and manual fine-tuning.

- Off timer.
- Channel skip or erase, or equivalent.
- Scroll through channels using up/down or left/right keys.
- Rear AV (audio/visual) output — sockets that allow the TV to send signals to an external device such as a video recorder.
- Composite video input — the standard AV connection for a video, DVD or camcorder. (S-video and component video are other types of input — see below.)

Useful features

See the table, page 42, for details of which models have the following features, unless stated here.

- 'Full-stereo' TVs can receive broadcasts in stereo (they have a stereo tuner) and have stereo AV inputs as well. 'AV stereo' TVs have AV stereo inputs (so they can play a video in stereo, for example) but can't receive TV broadcasts in stereo (only the **PHILIPS** is a full-stereo TV).
- Channel relocate: This allows you to relocate channel assignments, so that, for example, channels 2, 7, 9 and 10 can become 1, 2, 3 and 4.

Teletext: Allows information to be displayed as text on the screen.

Front AV input: This provides an easy way to connect a temporary item such as a camcorder to the TV, or to connect another piece of equipment when the rear AV sockets are connected to a VCR or DVD. It's even better if the front input is independent of the rear one, so you have two.

S-video input: An input socket for connection to the S-video or S-VHS output of a signal source such as a VCR, DVD or camcorder. This connection is claimed to give better picture quality than a composite video connection.

Component video input: Also a set of input sockets for connection to the component video output of a signal source such as a DVD or camcorder, which is claimed to give better picture quality than either the S-video or composite video input/output connection.

Previous channel button: Allows you to return to the last channel viewed (all models except the **AKAI** and **SAMSUNG**).

On timer: So you can set the TV to turn on at a set time (all models except the **AKAI** and **KONKA**).

Brand / model (in rank order)	PERFORMANCE					6 FEATURES				
	1 Overall score (%)	2 Picture quality score (%)	3 Sound quality score (%)	4 Ease of use score (%)	5 Standby energy score (%)	Genuinely flat screen	Can receive stereo broadcasts	Stereo-capable AV input	Channel relocate or equivalent	Tele-
PHILIPS 21PT2302/79R	78	81	75	64	100	✓	✓	✓	✓	✓
SANYO CP21AF2	75	79	72	64	80	✓		✓	✓	
RANK ARENA RK-21F11 (A)	73	80	71	64	60	✓		✓	✓	
SAMSUNG CB-21K2	73	79	51	80	70	✓			✓	
CELESTIAL 21B33	69	71	59	70	80			✓	✓	
AKAI CT-21PA2A	67	73	54	66	60	✓		✓	✓	
KONKA K2106EXT1	67	75	55	59	70			✓	✓	✓
RCA R21NKOBA	66	75	59	57	50			✓		
NEC PF-51V21	61	57	72	75	30	✓		✓	✓	
HAIER HT-2199AV	60	66	53	66	30				✓	
PALSONIC S179G	58	59	56	66	40				✓	
OMNI S160NF (A)	57	54	58	68	50			✓	✓	

PROFILES

Models in the *What to buy* list are profiled in rank order. Prices are recommended retail, as provided by manufacturers in December 2002.



PHILIPS 21PT2302/79R

Price: \$749

GOOD POINTS

- Good picture and sound quality.
- Bass and treble sound controls.
- Low standby energy consumption.
- Sound-widening effect.
- Stereo-capable tuner, which means it can receive TV broadcasts in stereo.
- Teletext.
- Child lock.
- S-video and component video inputs.
- Earphone/headphone socket.

BAD POINTS

- None to mention.



SANYO CP21AF2

Price: \$529

GOOD POINTS

- Good picture and sound quality.
- Bass and treble sound controls.
- S-video input.
- Earphone/headphone socket.
- Child lock.

BAD POINTS

- None to mention.



RANK ARENA RK-21F11

Price: \$549

GOOD POINTS

- Good picture and sound quality.
- Bass and treble sound controls.
- Sound-widening effect.

BAD POINTS

- Instruction book could be clearer.

WHAT ABOUT THE REST?

■ The **CELESTIAL**, **AKAI**, **KONKA**, **RCA**, **HAIER**, **PALSONIC** and **OMNI** all scored comparatively poorly for sound quality, and their picture quality and the **NEC**'s wasn't as good as that of the top four models (the **NEC**, **PALSONIC** and **OMNI** scored particularly low in comparison for picture quality. **NEC** tells us the greenish tinge we noticed can be corrected with adjustment by a special remote control only used by its service technicians; contact the company if you have this problem).

■ The **NEC**, **HAIER**, **PALSONIC**, **RCA** and **OMNI** also use a lot more energy on standby than the better models.

					SPECIFICATIONS				
V input on front	Front AV input independent of rear input	S-video input	Component video input	Earphone / headphone socket	Dimensions (H x W x D, cm)*	Warranty (years)	Origin	Manufacturer / distributor	Price (\$)**
✓		✓	✓	✓	46 x 60 x 51	1 (B)	China	Philips	749
✓		✓		✓	46 x 59 x 49	1	Indonesia	Sanyo	529
✓					45 x 63 x 49	1	Korea	Rank Arena	549
na					47 x 50 x 49	1	Korea	Samsung	499
na					46 x 59 x 49	3	China	Changhong	419
✓				✓	47 x 60 x 49	1	China	Prima	599
✓		✓		✓	49 x 51 x 49	3	China	Pebble International	369
✓					46 x 61 x 50	1	China	Thomson Multimedia	299
✓		✓		✓	47 x 59 x 49	1	China	NEC	499
✓		✓			47 x 61 x 48	3	China	Higher Electronics	329
					48 x 60 x 48	1	China	NG Enterprises	399
✓					48 x 62 x 49	1	China	Galas Electronics	349

* Rounded up to the next centimetre; all protruding parts except the cord included.

** Prices are recommended retail, as provided by manufacturers in December 2002.

na Not applicable — no front AV input.

(A) This model has been discontinued, but may still be available in shops.

(B) Information with the TV says one year, but the manufacturer tells us it's now three years.

1 Overall score

The overall score is a combination of the following:

- Picture quality: 50%
- Sound quality: 20%
- Ease of use: 20%
- Standby energy: 10%

2 Picture quality score

This score is the combination of a visual evaluation of movies (80%) and a visual and geometric evaluation of picture patterns (20%).

3 Sound quality score

A combination of a general listening assessment (80%) and measurements of the sound for frequency range and smoothness (20%).

4 Ease of use score

This is made up of the ease of use of the remote control (50%), manual tuning of the TV (20%), the user-friendliness of the onscreen display (20%) and the front panel controls (10%).

5 Standby energy score

The TVs were measured for how much energy they use while on standby (when the TV's turned off by the remote control but is still connected to power). The measurement is based on the TV being on standby for 19 hours a day and watched for the rest of the time. The cost can be as little as 70 cents a year to around \$17, but with thousands of TVs left on standby across the country every day, there's also an environmental cost, with a substantial amount of electricity wasted and carbon dioxide unnecessarily produced.

6 Features

See *What to look for*, page 40, for an explanation of these features.

MISSING IN ACTION

You might notice some well-known brands missing from this test. Unfortunately some new models weren't released in time for us to include them. We'll have an update with those models later in the year.



SAMSUNG CB-21K2

Price: \$499

GOOD POINTS

- Good picture quality.
- Very good remote control.
- Aspect ratio control, which means you can change the shape of the picture from normal (4:3) to widescreen (16:9) and back.
- Top for ease of use.
- Child lock.

BAD POINTS

- Sound quality is ordinary — plain and hollow.
- No stereo-capable AV input, so DVDs and stereo videos will play with mono sound only.
- AV input isn't accessible from the front.
- No 'previous channel' function.

For people with a disability

We used a set of guidelines supplied by the Independent Living Centre to identify the models most suitable for someone with a disability.

- For people with a vision or dexterity problem, the **CELESTIAL**'s front panel controls have keys that are prominent, adequately sized and well labelled. Considering the same aspects on the remote control, the **AKAI** and **SAMSUNG** are both suitable.
- The controls on the **KONKA** and **PHILIPS** are on top of the unit instead of the front, so would be useful for someone who has difficulty bending over, though difficult to access if the TV was in a cabinet.
- For the hearing-impaired, the **AKAI**, **KONKA**, **NEC**, **PHILIPS** and **SANYO** are the only models with a headphone socket, while only the **PHILIPS** and **KONKA** have teletext.

CORDLESS goes flash

More choices and options,
from a range of good models.

IN A NUTSHELL

- One model has sound quality problems, and is best avoided.
- Some models have quite limited talk times — see the table, page 46.
- Digital phones offer more security from eavesdropping, and some models have more features.



The convenience of being cord-free is now just one aspect of a cordless phone. If you can't get by without caller ID, redial features, loads of storage for frequently used numbers or an intercom, there's a phone for you in our test. You can still get a basic phone of sorts, but even the cheapest have storage for at least 10 numbers and can handle features like call waiting and last number redial.

At the other end of the scale, DECT (digital enhanced cordless technology) phones take cordless technology into new areas. Many look like mobile phones, which makes sense as they work in a similar way. Instead of getting extended range from a more powerful signal, DECT phones do it by letting you add bases at regular intervals. If you're talking and move out of the range of one base, your call will transfer to the next, just like a mobile phone does with transmitter masts.

Up to six handsets can be registered per base, and calls can be transferred between handsets, which can also be used as small radio intercoms. If you need more than one line connected at a time, handsets can be registered to more than one base — but, of course, the more phones and bases you have, the more it costs. Handsets from different brands can also be connected to bases.

There's more yet. DECT phones have displays for features like caller ID, can store identified numbers or call them back at the touch of a button, and in some countries they even feature text messaging. Because DECT systems use compatible technology with mobile phones, in future there may be single handsets that are both mobile and landline-based phones.

DECT phone transmissions are in digital code, so you're safe from eavesdropping.

WALKING AND TALKING

Battery power's crucial: in our test, most gave 10 or more hours of talk time. Shortest were the OMNI CT2020 (6.5 hours), the LG GT-8110 and GE 1.8GHz DECT AU27860GE-A (both 7.5 hours).

Continued on page 46

WHAT'S ON TEST?

We tested six analogue and six digital cordless phones, and four models from last year's test are still available. We chose the cheapest models in each category, with an upper limit of \$300 for the digital models.

WHAT TO BUY

Analogue phones	
AUDIOLINE FF895	\$199
PANASONIC KX-TC1200	\$119
UNIDEN XS610	\$99
Digital phones	
UNIDEN DECT 1811	\$199
LG GT-8110	\$169

Profiles

The models in the *What to buy* list are profiled in rank order. Prices shown are recommended retail, as provided by manufacturers in October 2002. All of these models are good phones — base your choice on the features you want, or just go for a good price.

ANALOGUE PHONES

AUDIOLINE FF895

Price: \$199

GOOD POINTS

- Equal-best analogue phone indoor range.
- 15 hours* talk time and long standby time.
- Answering machine.
- Backlit keypad.
- Caller ID.
- Supports up to four handsets.

BAD POINTS

- Sound not as clear as most models — a little affected by line noise.
- As with all analogue phones, voice transmissions aren't secure.



PANASONIC KX-TC1200

Price: \$119

GOOD POINTS

- Equal easiest to use.
- Backlit keypad.
- Long standby time.

BAD POINTS

- Complicated instructions on a single large sheet.
- No out-of-range warning.
- As with all analogue phones, voice transmissions aren't secure.



UNIDEN XS610

Price: \$99

BEST BUY

GOOD POINTS

- Good speech performance.
- Comfortable handset with very well laid-out number pad.
- Long standby time.
- Backlit keypad.

BAD POINTS

- Comparatively short talk time (8.5 hours).
- As with all analogue phones, voice transmissions aren't secure.



DIGITAL PHONES

UNIDEN DECT 1811

Price: \$199

GOOD POINTS

- Equal easiest to use.
- Equal-best digital phone indoor range.
- Long standby time.
- Very good speech performance.
- Caller ID.
- Supports up to five handsets from the base.
- As with all digital phones, conversations are secure.

BAD POINTS

- Not wall-mountable.



LG GT-8110

Price: \$169

GOOD POINTS

- Long standby time.
 - Generally easy to use.
 - As with all digital phones, conversations are secure.
- #### BAD POINTS
- Comparatively short talk time (7.5 hours).
 - Wide handset is uncomfortable to grip.



WHAT ABOUT THE REST?

Analogue models

Though the **TELSTRA Freedom 70** had very good sound quality, its inside range was equal shortest, and it had a short battery life on standby.

The **OMNI CT2020** scored much lower for performance than the recommended models, dragged down by noticeably lower sound clarity with higher line noise.

A digital display and caller ID combined with a low price might convince you to buy the **GE AU273GE2-B**, though its range inside is a little short, and a less convenient set of instructions and keypad lowered its ease of use score.

Digital models

The **UNIDEN DECT 1805** phone has plenty of features and rated quite well overall, but its comparatively short standby time combined with average talk time kept it out of our *What to buy* list.

The **TELSTRA Freedom 2010** has DECT features and can store 50 numbers, but has the shortest inside range of the digital phones.

The **GE 1.8GHz DECT AU27860GE-A** has very short standby time, a comparatively short talk time and no out-of-range warning.

The **PANASONIC KX-TC700AL** DECT phone has a shortish inside range and standby time, but plenty of talk time.

The **DORO DECT 5035** and **DECT 8075** have just over half the indoor range of the best DECT models. The **8075** is also very small, like a mobile phone, which makes the numbers harder to read and the keypad more difficult to use. But you may like the convenience of its small size or the 'mobile phone' look and be prepared to live with these shortcomings.

Brand / model (in rank order within groups)	PERFORMANCE									8 FEATURES		
	1 Overall score (%)	2 Performance score (%)	3 Ease of use score (%)	4 Talk time (hours)	Standby time (days)	Recharge time (hours)	5 Range outside (m)	6 Range inside house (m)	7 Ring loudness (max, dB)	Wall-mountable	Paging	Spvo co
ANALOGUE PHONES												
AUDIOLINE FF895 (A)	80	85	64	15	13	11.7	450	60	77 (C)	✓	✓ (E)	✓
PANASONIC KX-TC1200	80	77	85	11.5	14+	9.8	450	40	66 (D)	✓	✓	✓
UNIDEN X5610	80	80	81	8.5	14+	13.2	450	40	74 (D)	✓	✓	✓
TELSTRA Freedom 70	77	74	84	11.5	4	14.0	500	35	65 (D)	✓	✓	✓
OMNI CT2020	71	66	83	6.5	6.5	11.0	300	60	64	✓	✓	✓
GE AU26735GE2-B	70	72	64	9.5	9	9.5	500	35	71		(F)	✓
DIGITAL PHONES												
UNIDEN DECT 1811	87	88	85	15	14+	13.0	350	95	69 (D)		✓ (G)	✓
LG GT-8110	79	77	81	7.5	12.5	10.0	500	90	68 (D)	✓	✓	✓
UNIDEN DECT 1805	77	78	72	10.5	5	11.2	250	70	72 (D)		✓ (H)	✓
TELSTRA Freedom 2010 DECT (B)	72	70	78	15+	14+	11.7	200	40	73 (D)		✓ (H)	✓
GE 1.8GHz DECT AU27860GE-A	70	74	61	7.5	4.5	3.4	250	95	73 (D)		✓ (H)	✓
PANASONIC KX-TC2700AL DECT	69	70	65	15+	7.5	20.8	250	65	70 (D)	✓	✓ (H)	✓
DORO DECT 5035	63	63	63	15+	6.5	5.7	200	50	84 (D)		✓ (H)	✓
DORO DECT 8075	61	60	62	9.5	4.5	7.0	170	50	75 (D)		✓ (H)	✓

* Prices shown are recommended retail, as provided by manufacturers in October 2002.

(A) Includes an answering machine.

(B) This model has now been discontinued but you may still find it available.

(C) Four settings on base, one on handset.

(D) Ring volume is adjustable.

(E) Has two-way paging.

(F) Intercom between handsets.

(G) One-way paging only.

(H) Can page from base, and intercom between additional handsets.

(I) Excludes battery.

Continued from page 44

In standby mode, most models lasted for days — we stopped counting after a fortnight with four of the models. However, at the shorter end, the **TELSTRA Freedom 70** (four days), **DORO DECT 8075**, **GE 1.8 GHz AU27860GE-A** (both 4.5 days) and **UNIDEN DECT 1805** (five days) might not have enough standby endurance for some people.

There are limits to how far you can roam from the base, especially if there are solid walls, trees or even wire fences in the way. This sort of obstacle is a big challenge for the low-powered radio systems used in cordless phones. Be wary of claims for digital phones of really big distances such as one kilometre or more. These only apply in unobstructed conditions.

And while we list quite impressive-looking distances in the table for our internal range test, it may not be that good at your place — typical internal obstructions can reduce the range to under 30 metres. That said, all the phones tested this time are adequate for normal suburban use.

This year the digital phones lived up to their frequent claim of clearer sound without line noise. But the best of the analogue models weren't far behind. The worst of the analogues was another matter: the **OMNI CT2020** was noticeably less clear, had a lot of line noise and was only just loud enough to be heard. The **AUDIOLINE FF895** was also affected by line noise and wasn't as clear as the better models, though it rated well otherwise. ■

What to look for

Before buying a cordless phone, work out your needs.

■ A phone that has a dial pad and speaker on the base allows you to make calls from the base when the handset is out in the garden. This type of phone usually acts as an intercom as well.

■ Get a phone with more secure voice transmission (digital) if you regularly use your phone to make credit card transactions.

■ Caller ID lets you know the number a call is coming from, unless the owner has blocked ID display. The last few numbers to call are stored — check how many if this record is important to you. You can redial from the stored numbers, and on some phones you can store them to your frequently used number memory. But check that the system correctly inserts STD codes for long-distance calls.

■ Check the ringer equivalence number (REN) you're already using before buying. Anything you connect to your phone line draws from the line's capacity. The amount drawn is the REN, which is usually printed on the bottom of the appliance. Generally, phone lines have a maximum REN capacity of 3. If the sum of the RENs of all the appliances connected to your line exceeds this, they may not work properly — for example, your phone may not ring. You may have to shop for a low-REN cordless phone to stay under your limit.

■ Most cordless phone bases rely on mains power. You need an additional ordinary phone in case of power failure.

■ If you want to talk to other people on your property or switch calls between handsets, a DECT phone with multiple handsets could be useful.

■ Check the phone has enough talk time and standby time for your needs. Use the claims on the box as a rough guide.

					SPECIFICATIONS					
	Backlit keypad	Out-of-range warning	Hearing aid compatible	Handsets supported	9 REN	10 Battery type	Origin	Warranty (years)	Manufacturer / distributor	Price (\$)*
✓	✓			4	0.1	NiMH	China	1 (J)	Doro	199
✓			✓	1	0.5	NiCad	Thailand	Not stated	Panasonic	119
✓	✓	✓		1	1	NiCad	China	1	Uniden	99
		✓	✓	1	0.5	NiMH	China	1	Tech Pacific	100
		✓	✓	1	0.5	NiMH	China	1	Omni	60
✓	✓			3	0.1	NiCad	China	1	Atlinks	80
		✓	✓	5	1	NiMH	Korea	1 (K)	Uniden	199
		✓	✓	1	0.51	NiCad	Thailand	1 (L)	LG Electronics	169
		✓	✓	6	1	NiCad	China	1 (K)	Uniden	159
			✓	5	0.1	NiMH	China	1	Tech Pacific	150
				5	0.1	NiCad	China	1	Atlinks	149
✓	✓			6	1	NiMH	Thailand	1 (J)	Panasonic	219
		✓		4	0.1	NiMH	China	1 (J)	Doro	169
		✓		6	0.5	NiMH	China	1 (J)	Doro	199

(K) Battery and charger 90 days.

(L) Battery six months.

- Choose a multi-channel model so you can change channels in case of interference (also see *Autoscan*, below).
- Check for compatibility with a hearing aid.
- Consider whether you want to have an answering machine in the same unit or, alternatively, find out if the phone supports message services. Does it have a message indicator?
- Look for clearly labelled large keys with backlighting if you'll need to use the phone in poor light.
- Try the handset to ensure it's not too small or too heavy, is comfortable to hold and fits well to your face.

FEATURES ALL THE TESTED MODELS HAVE

- Ten or more channels.
- Autoscan, which picks the best channel when you answer a call. All the tested phones have either a manual channel-change button or an automatic feature that changes the channel whenever interference is a problem. Automatic change is standard on DECT phones.
- Redial function for the last number called.
- A # (hash) key, which may be needed for automated telephone services.
- Auto-standby and auto-talk. If the handset is in the base station and you receive a call, this function allows you pick up the handset and start talking immediately. To hang up you either press the talk button or put the phone back on the base.
- Low-battery warning — either a dedicated light or the talk button flashes.
- Security codes so others can't use your base station to run up big bills.
- A pager feature: press a button on the base station and the handset beeps — useful when you lose your phone in the garden or round the house.

1 Overall score

The overall score is a combination of performance (70%) and ease of use (30%).

2 Performance score

The performance score is a combination of the following measurements and user panel assessments:

- Talk time: 10%
- Standby time: 10%
- Range (inside and outside): 40%
- Tech quality: 20%
- Speech loudness: 10%
- Background noise reduction: 10%.

3 Ease of use score

A panel of three people assessed the following (all weighted equally):

- Clarity and completeness of the instruction manual.
- Layout of keys and controls.
- Readability of the numbers and labels.
- Feel and comfort of the handset.
- Ease of cleaning the phone.

4 Talk time

The number of hours the phone lasted in talk mode, rounded down to the nearest half-hour.

5 Range outside a house

The base station was set up with a relatively unobstructed path outside. The distance was measured at which voice transmission could just be heard and a dial tone was received.

6 Range inside a house

The range through walls was measured as above to check the effect of obstructions. The results are just for comparison, as different wall materials will affect performance.

7 Ringer loudness

Measured at 1 m from the handset while it wasn't on the base.

8 Features

See *What to look for*, left, for an explanation of some of these features.

9 REN: ringer equivalence number

Generally, phone lines have a maximum REN capacity of 3 — see *What to look for* for more.

10 Battery type

Nickel metal hydride (NiMH) cells don't contain toxic cadmium, making them safer for disposal in landfills.

recalls&bans

Nowadays there are so many product recalls we may not be able to print all of them in CHOICE. For comprehensive recall information go to the Federal Treasury website: www.recalls.gov.au. If you don't have web access, call the **Consumer Safety Unit** on (02) 6263 2747.

Companies often rent 1800 numbers for a couple of months after a recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Multicrop has recalled **Multicrop Pyrethrum Insect Spray**, 750 mL, batch numbers BN/DO 04/02 and BN/DO 150702, and **Pyrethrum Long Life Spray**, 750 mL, batch numbers BN/DO 05/02 and BN/DO 30702. The batch number is on the back label at the bottom right-hand side.

The problem: The concentration of the active ingredient differs from that on the label by more than the prescribed limits. This may affect the product's effectiveness (see CHOICE, December 2002, for more).

What to do: Call (03) 8720 2110, Monday to Friday, 9 am–5 pm EST, to arrange a refund.

THE PRODUCT: Delphic Wholesalers has recalled **Delphic Star Skim Milk Fetta Wedges** and **Mil Let Superior Parmesan Wedges**, both with best-before dates of May 13, 14, and 15 2003, sold in Victoria. Both are packaged in a 250–300 g cryovac packet with pre-printed adhesive labels on the front and back.

The problem: The cheese may contain *Listeria monocytogenes* bacteria, which can cause miscarriage in pregnant women, and illness in the very young, the elderly or those with an impaired immune system.

What to do: Don't eat it, and speak to your GP if you're concerned for your health. Return it to the place of purchase for a refund or call 1300 139 214 for more information.

THE PRODUCT: MasterFoods has recalled **Dolmio Traditional Bolognese Classic Tomato Sauce**, 785 g, best before 5/6/04; **Dolmio Chunky Bolognese Tomato, Onion & Garlic Sauce**, 785 g, best before 21/12/03; and **Kan Tong Stir-Fry Sauce Sweet & Sour**, 790 g, best before 7/12/03.

The problem: The bottles may contain small glass fragments.

What to do: Don't eat it. Return it to the place of purchase for a refund or call 1800 240 446 for more information.

THE PRODUCT: Kenman Kandy has recalled **Kenman Fun to Share Best**

Value Party Mix, 450 g, 750 g and 1 kg, **Black & Gold Party Mix**, 200 g and 500 g, and **Bols Party Lollies**, 200 g (Kmart).

Best-before dates affected are: Kenman 450 g: all best-before dates up to 1 December 2003. Kenman 750 g: all best-before dates up to 1 January 2004. Kenman 1 kg: all best-before dates up to 1 October 2003.

Black & Gold 200 g: all best-before dates up to 1 December 2003.

Black & Gold 500 g: all best-before dates up to 1 January 2004.

Bols: all best-before dates up to 1 November 2003.

The problem: Some jelly products in the mix contain egg albumen and aren't labelled as such.

What to do: Don't eat it, particularly if you have an allergy to egg. Return it to the place of purchase for a refund or call 1800 674 830 for more information.

THE PRODUCT: Hunts Foods WA has recalled **Hunts Frozen Beef Savoury Rice** and **Frozen Chicken Savoury Rice**, packaged in 375 g preprinted polyethylene bags, and sold in WA. The Beef Savoury Rice has best-before dates of 28 Aug 04, 5 Sept 04, 26 Sept 04, 6 Nov 04, 14 Nov 04, 21 Nov 04, 5 Dec 04, 10 Dec 04 and 16 Jan 05. The Chicken Savoury Rice has best-before dates of 5 Sept 04, 19 Sept 04, 14 Nov 04, 12 Dec 04 and 16 Jan 05.

The problem: The packaging states "No MSG", while the ingredients list says flavour enhancer 621 (MSG) is present.

What to do: Don't eat it if you're sensitive to MSG. Seek medical advice if you're concerned. Return it to the place of purchase for a refund or call (08) 9841 2588 for more information.

THE PRODUCT: 3M Pharmaceuticals has recalled all batches of **Difflam-C Alcohol Free Solution** in 30 mL, 100 mL and 500 mL bottles, with Aust R 79366 printed on the package.

The problem: Some bottles may be subject to microbial contamination. **What to do:** Don't use it. Return it to the place of purchase for a refund or call 1800 225 536 for more information.

THE PRODUCT: Ego Pharmaceuticals has recalled **Sunsense Sport Milk**

Sunscreen in 10 g tube and 50 mL, 250 mL, 500 mL bottles. All packs have a white map of Australia on the blue panel, with Aust L 82237 on the bottles.

The problem: A new formulation has caused skin reactions in some people that appear to be associated with a new ingredient.

What to do: Contact your GP if you're worried about a skin reaction. Call 1800 355 015, 9 am–5 pm EST, to arrange a refund.

THE PRODUCT: Key Pharmaceuticals has recalled **Travacalm Original Tablets** and **Travacalm HO Tablets**.

■ The Travacalm Original Tablets have Aust R 78192 printed on the label and the following details:

batch 77164 expiry date 06/2005;

batch 78856 expiry date 08/2005;

batch 79954 expiry date 10/2005.

■ The Travacalm HO Tablets have Aust R 68450 printed on the label and the following details: batch 77163 expiry date 06/2005; batch 79376 expiry date 08/2005.

The problem: A number of users have reported excess side effects related to the active ingredients.

What to do: Don't use them. Return them to the place of purchase for a refund, or call 1800 653 373 for more information.

THE PRODUCT: International Dynamics has recalled **Loewe Profile and Contour 70 cm and 72 cm televisions** produced in Germany between April 1999 and July 1999, and sold in Australia some months later. Affected sets have the following serial numbers: Contur 1670

(Art No 58404L): 007940 to 011268, 002550 to 003549; Loewe Profile 3563 (Art No 58436L): 005880 to 008752, 001600 to 001850; Loewe Profile 3570 (Art No 58437L): 009229 to 013279, 001270 to 001880; Loewe Profile 3572 (Art No 58438L): 017565 to 027006, 002784 to 003584.

The problem: Some sets may have a manufacturing weakness that could lead to overheating at the bottom of the set, and ignition.

What to do: Call 1800 456 393,

Monday to Friday, 9 am–5 pm, to arrange for an onsite inspection and, if necessary, free modification. Until the set is inspected, don't leave the TV unattended when in use. If it overheats, turn it off and remove the plug from the wall socket.

THE PRODUCT: Freedom has recalled **Nixi cushions** sold between July 2002 and January 10, 2003. The cushion forms part of the Nixi chair, is round in shape, with a diameter of about 125 cm, and is red or black.

The problem: The foam stuffing may contain foreign objects that could cause injury.

What to do: Stop using the chair and contact your local Freedom store to arrange return and replacement of the cushion. For more information call 1300 765 222.

THE PRODUCT: Go-Lo has recalled **144/8 Shot Plastic Disc Caps**, item number TY2662, barcode 9312139082835, sold in Go-Lo and Crazy Prices between 2000 and November 2002. The packet is made up of two square plastic holders, with nine disks of caps in each part. **The problem:** The caps may explode on their own and cause injury. **What to do:** Don't use them. Store carefully before returning them to the place of purchase for a refund. For more information call (02) 8796 6144.

THE PRODUCT: Look Sharp Concepts has recalled **Toy Joiners Do-It-Yourself Toolkit**, barcode number 9316292066831, sold between October 2002 and November 2002. The toy is made up of a plastic helmet with an assortment of plastic tools, including a plastic nut and bolt.

The problem: The small plastic nut may pose a choking risk to young children. **What to do:** Don't use the toolkit. Store carefully before returning it to the place of purchase for a refund. For more information call (02) 9688 1900.

THE PRODUCT: Wah Lien Trading has recalled **Konnyaku jelly powder**, 250 g plastic pack, with a use-by date of 24 07 04, sold in SA and Victoria.

The problem: The product contains konjac, which is a choking hazard and isn't permitted as an additive in Australia.

What to do: Don't eat it. Return it to the place of purchase for a refund. For more information call (03) 9376 2888.

Expand your skills with *Computer CHOICE*

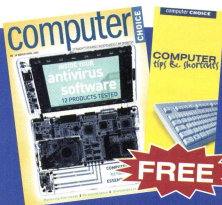
Subscribe now and get a **FREE** bonus issue and tips booklet

Computer CHOICE magazine will help you get more out of your computer.

It's easy to read and every issue is packed with the latest computer news, tips, product reviews and practical workshops. And because we're totally independent and advertising-free, you're guaranteed credible hardware and software tests and product information without the hype.

In your **FREE** issue:

- **Are you really protected?**
The ins and outs of antivirus software.
 - **Buying a PC** — how to get a good deal whatever your budget.
 - **Infected email** — ways to safeguard your inbox from email viruses.
 - **Online services** — our guide to essential services on the web.
- Plus a keyboard test, uninstaller packages, mastering mailmerge and lots more.



Subscribe now and we'll send you this handy *Computer tips and shortcuts* booklet, full of useful keyboard shortcuts and key reference information.

Computer CHOICE Order Form

Personal subscription

1 year (6 issues) ☐ \$41.80 2 years (12 issues) ☐ \$79.20
☐ \$37.40* ☐ \$70.40*

Professional/institution

1 year (6 issues) ☐ \$66.00 2 years (12 issues) ☐ \$123.00

* If you subscribe to CHOICE or another of our publications.

Delivery details

Mr/Ms/Mrs/Miss

Address

Postcode

Phone (daytime) Subscriber no

(If applicable, it's on the address label that came with this magazine)

Payment details

☐ Please debit the selected credit card for \$.....

☐ Bankcard ☐ Mastercard ☐ Visa
☐ Amex ☐ Diners Club Expiry date/...../.....

Card no.

Name of cardholder

Signature Date/...../.....

OR

☐ Enclosed is a cheque/money order for \$.....
 (payable to the Australian Consumers' Association)

INS/0304

MAIL TO: Australian Consumers' Association, Reply Paid 63261, Marrickville NSW 2204

PHONE: 1800 069 552 8.30 am–5 pm Mon–Fri EST and quote INS0304 (please have credit card details handy)

FAX: (02) 9577 3355 ACN 000 281 925 ABN 35 799 246 568 This form may be used as a tax invoice.

about choice

The magazine is published by the Australian Consumers' Association

CONTACT US

WRITE to us at CHOICE, 57 Carrington Road, Marrickville 2204.

PHONE us on (02) 9577 3399.

FAX us on (02) 9577 3377.

EMAIL us at ausconsumer@choice.com.au

YOUR LETTERS

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we need to follow up your letter. We're sorry we can't answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.

Subscribe to CHOICE

Personal subscriptions: \$63.80 for one year, \$118.80 for two years.

Companies/Institutions: \$99.00 for one year, \$187.00 for two years.

For subscription and renewal enquiries only, call 1800 069 552.

All literary and artistic works and compilations of information are the subject of Australian and international copyright © Australian Consumers' Association 2003. CHOICE™ is a trademark of the Australian Consumers' Association. All rights reserved.

CHOICE ONLINE

For a limited time, personal CHOICE subscribers can have free access to www.choice.com.au. This offer will end soon. If you're interested, just call (02) 9577 3399 and have your email address ready.



Call 1300 360 655
and let us shop for you

All you need is the model name and number you want to buy, the price you want to beat, and your CHOICE subscriber number (from the mailing label with the magazine). CHOICE Shopper is available to personal subscribers only.

CHIEF EXECUTIVE OFFICER: Louise Sylvan.

Executive assistant: Kathleen Davies.

CONTENT: General Manager Norm Crothers.

CHOICE: Editor Jane Mackenzie.

Writers/Journalists this issue: Brigitte Baader, Michael Hohl, Kim Laurie, David Lovejoy, Uta Mihm, Liz Munn, Jackie Pearson, Chris Ruggles, Hamish Wilson.

Computer CHOICE: Editor Jessica Ross. **Deputy Editor/Journalist** Luisa Bustos.

CHOICE BOOKS: Publisher Richard Smart. **Editor:** Colette Batha. **Editorial, distribution,**

marketing and online co-ordinator: Tracey McTeare.

CHOICE ONLINE: Manager Linda Magee. **Deputy:** Chris Ruggles. **Webmaster:** Meagan Turner.

Content generation: Zara Baxter, Annette Coburn, Michael Hohl, Kim Laurie, Uta Mihm, Liz Munn, Jackie Pearson, Bill Psiroukis, Martha Psiroukis, Chris Ruggles.

RESEARCH AND TEST CENTRE: Manager John Ashes. **Laboratory manager:** Klaus Neuscheler.

Antonio Bonacruz, Brian Champion, Geoff Day, Peter Horvath, Mohamed Jawahir, Fiona Mair,

Benjamin Rossetto, Tabatha Smith, Petr Valouch. **Buying:** Dorothy Kneale, Kate Murdoch.

Research: Christine Shadley, Joe Sydney.

COMMUNITY: General Manager Mary Harris. **Community research:** Belinda Chu, Alison Keady,

Melanie Stopic. **Marketing co-ordinator:** Kellie Thomson.

CONSUMER SERVICES: Manager Bill Stuart. **Team leader:** Mark Bond. **Lizzie Ball, Silvana**

Ristevska, Elke Strecker, Sarah Wilson.

QUALITY AND IT SYSTEMS: General Manager Barbara Manchester. **Subscriptions:** Manager Bill

Stuart. **Supervisor:** Nootayla Hwang. **Co-ordinator:** Thelma Bracken. **Lynnda-Maree Colombo,**

Fiona Pollard, IT: Manager Stephen Macdonald. **Charles Ly, Quality control:** Manager Pam

Gardiner. **Verifiers:** Sharon Cauduro, Corinna Horrigan, Elizabeth Hunt, Lawson Lobb.

POLICY AND PUBLIC AFFAIRS: Charles Britton, Martyn Goddard, Clare Hughes, Catherine

Wolthuisen.

CONSUMING INTEREST: Editor Peter Cereche.

SENIOR MEDIA CO-ORDINATOR: Gail Kennedy.

The Australian Consumers' Association is a non-profit, non-party-political organisation, established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance their quality of life. It's a Council member of Consumers International.

We are completely independent. Our income is derived solely from the sale of CHOICE and our other publications and products. All the products we subject to full testing and comparison are purchased by us in the marketplace; sometimes to get the latest model we may buy directly from a manufacturer where we can select a random sample ourselves. We never accept gifts from manufacturers or retailers; we sometimes borrow samples, especially of new products, for quick reviews or pre-evaluation before we can buy in the marketplace. We are not beholden to any commercial, government or union interests, and we don't accept advertising, paid or unpaid.

We test and rate products and services. Our ratings are usually based on quality without regard to price, and are derived from lab tests, expert judgments and reader surveys. If a product is high in quality and relatively low in price, we deem it a **Best Buy**. A rating applies only to the brand and model tested, not to other models sold under the same brand name, unless so noted. Financial information in CHOICE is of a general nature, and is not intended to be advice on individual investments.

We represent and act in consumers' interests. We lobby and campaign on behalf of consumers to promote their rights, to influence government policy, and to ensure consumer issues have a high profile in the public arena.

Membership. Subscribers can become voting members of the Consumers' Association on application. Voting membership costs \$93.50 for a year, which covers your subscription to CHOICE with free access to CHOICE Online and a further subscription to our policy and campaigning magazine, *Consuming Interest*.

No commercial use policy. Our ratings and reports may not be used in advertising or for any other commercial purpose. The Consumers' Association will take all steps open to it to prevent commercial use of its materials, its name, and the name of CHOICE or its other publications and products. Please report any apparent violation to the Consumers' Association, 57 Carrington Road, Marrickville 2204; phone (02) 9577 3399; fax (02) 9577 3355; email ausconsumer@choice.com.au.

Permissions. Reproduction of CHOICE, CHOICE Books and other CHOICE publications, in whole or in part, is forbidden without prior written permission (and is never permitted for commercial purposes). Address requests to CHOICE Consumer Services at the address above left.

Your privacy. We're committed to protecting your privacy, and abide by Australia's National Privacy Principles. We never sell or give our mailing lists to other organisations. If you'd like to read our privacy policy, it's on our website or we can send you a copy — see above left for how to contact us.

PRODUCTION: Production manager Darrell Sly. **Art director:** Michelle Havenstein. **Senior**

designer: Jacqui Fry. **Online production co-ordinator:** Rino Brebbaart. **Photographer/graphics**

co-ordinator: Anthony Savers.

FINANCE AND PROPERTY: Manager Alan Johnston. **Accounts:** Jeanette Dwyer, Kang Zhu Ge, Sera

Vunilaka. **Administration:** Jeanette Proby. **Library:** Jane Wholohan. **Records management:**

Shirley Colless.

TEST RESEARCH (NATA-accredited) provides independent, fee-for-service testing and research on consumer products, services and regulatory issues for other consumer organisations, governments and industry; under some conditions it undertakes public testing. **Contact:** Jeanette Dwyer on (02) 9577 3399.

Marketing statistics by GRK Marketing Services. **Financial information** supplied by Canex. **Services information** supplied by ASSIR.

The Australian Consumers' Association is governed by an honorary Council elected by the voting members. (For information about voting membership, contact CHOICE Consumer Information on (02) 9577 3399.) Members of the Council give their time without reimbursement, and are not engaged as principals in industry, advertising or sales.

COUNCIL: Chair Chris Field BA, LLB (Hons). **Deputy Chair:** Debra Harker PhD. **Members:** Allan Barton AM, JP, MSc, PhD, FRACI, FNZC; Robin Brown BA; Tony Charge BA, Dip Lib, AFAM; Cynthia Cliff BSc (Hons), PhD, Dip Env Stud, Grad Dip Outdoor Ed, Grad Dip Bus Admin, MRACI, C Chem; Tim Dixon BEC (Hons), LLB; Dr Ken Harvey MB BS, FRCPA, MASM; Dianne Hill FCA; Phil Marchionini MIRMHRM, Dip IR, Dip Lab Rel & the Law; Professor Ben Selinger FRACI, FAIFS, FAATSE; Joan Staples BA; John T D Wood BArch, FRAIA.

The Association is a not-for-profit company limited by guarantee. **ACN** 000 281 925.

ABN 35 799 246 568. **Registered office:** 57 Carrington Road, Marrickville 2204.

Telephone (02) 9577 3333. **Fax** (02) 9577 3377. **Subscription enquiries** (02) 9577 3399. **CHOICE**

Consumer Services (02) 9577 3399. email ausconsumer@choice.com.au. www.choice.com.au.

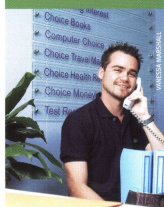
HOW TO USE THIS INDEX

Bold type indicates a test, survey or trial report, normal type indicates other articles.

* indicates an update of a previous report, additions or corrections to reports, small follow-up items, letters or recalls. For space reasons, the index generally doesn't include Choice Cuts and other small pieces.

A ir conditioners, portable Air travel, getting a good deal Alternative cold cures Antibiotics in chicken Anti-aging creams Appliance reliability	Nov Aug Jun Jun Mar Aug	E lectricity and gas deregulation Endorsement of food products Espresso machines Ethical manufacture	Jun Nov Apr May, Jan/Feb	I ndex, four-year Insulation, ceiling Insurance car health travel Irons, steam, expensive	Jun May Oct, Nov* Jul, Sep* Mar Jan/Feb	Superannuation Surround-sound systems	May Sep
B aby carriers Banks community how to switch satisfaction with Batteries, rechargeable Bicycle, buying for a child Blenders/food processors, combined Blower/vacs, garden Bread Bread mixes	Mar Jun Apr Nov Jun Dec Oct, Dec* May Jan/Feb Oct	F ast food Financial community banks home loan packages planners superannuation switching banks Food antibiotics in chicken bread bread mixes chicken, frozen meals diet controversies endorsement logos fast food for pets GM food update healthy eating guidelines hot chocolate drinks labelling milk mince 'miracle' foods safety survey smoked salmon soft-serve 'ice cream' vinegar Food processors/blenders, combined Fridges, 300–560 L	Jun Mar Jan/Feb, Apr* May Apr Jun Oct Aug Mar Nov Apr Sep Nov Jul Sep Oct, Dec* Oct May Jul Dec Dec Oct, Dec* Nov, Dec*	J eans, ethical manufacture Jogger strollers Labelling, food Laser printers Laundry detergents Lawn trimmers, petrol and electric Liquid soap Manufacture, ethical Massagers, home Microwave ovens, 20–25L frequently asked questions Milk Mince 'Miracle' foods Mobile phones customer service prepaid plans Moisturisers Money — see Banks, Financial Mortgages, packaged Mouthguards Painkilling rubs Paint, exterior PDAs Pesticides, garden sprays Pet food Phones, cordless Phones, mobile — see Mobile phones Portable air conditioners Pre-wash stain removers Printers, laser Razors, disposable Rechargeable batteries Red wine blends Refrigerators — see Fridges Reliability of appliances Rubber gloves Safes, home Safety glass Screwdriver/drill, cordless Sewing machines Slimming products Smoked salmon Soap, liquid Soft-serve 'ice cream' Sports mouthguards Stain removers carpet pre-wash Strollers, jogger	May Aug Sep Apr Jan/Feb Nov May May, Jan/Feb May Jun Jun Oct, Dec* Oct May Jul Oct Aug, Oct* Apr Mar Jul, Dec* Sep Dec Oct Dec, Apr* Sep Apr Nov Nov Nov Jun Jun Jun Dec Aug Dec Sep Jul Jul Dec Jul Dec May Dec Jul, Dec* Sep Nov Aug	T elephones — see Phones Television 51 cm 68 cm Travel deals, flights Travel insurance Trimmers hedge lawn Tyres Vacuum cleaners, expensive Vacuum flasks Video cameras, digital Vinegar Virus checkers Washing machines Washing up liquids Water filters Windscreens wipes Wine, red blends Wrinkle creams	Apr Nov Aug, Jan/Feb* Mar Oct Nov May Jul Aug Jan/Feb, Apr* May Aug May, Sep, Mar Apr Mar May Dec Mar
C ameras compact and APS digital Camcorders, digital Carpet stain removers Cars crash tests, ANCAP depreciation insurance reader reviews repair costs tyres Ceiling insulation Charities Chicken, frozen meals Child/baby concerns baby carriers buying a kid's bike jogger strollers Chocolate, hot drinks Cinema sound at home Cleaners carpet stains stains, pre-wash Coffee (espresso) machines Cold cures, alternative Computer virus checkers Computers, handheld (PDAs) Contact lenses Convection heaters, electric Cooktops, gas Cordless phones Cordless screwdriver/drill Corporate social responsibility Cough medicines Credit cards, top 10 Depreciation on cars Detergents, laundry Diet controversies Digital cameras Dishwashers Dishwashing liquids Disposable razors DVD players	Apr Dec Jan/Feb, Apr* Sep Oct, Apr Sep Oct, Nov* Jul, Jan/Feb Mar May May Nov, Mar* Aug Mar Dec Aug Jul Sep Sep Nov Apr Jun Aug Oct Oct Apr Apr Aug Jul Jan/Feb Dec Sep Jan/Feb Mar Dec Jun, Nov* Apr Jun Dec, Apr*	G arden blower/vacs hedge trimmers lawn trimmers, petrol and electric sprays (for pests and fungi) Gas and electricity deregulation Gas cooktops Gas heaters Glass, safety Gloves, rubber GM food update Health cold cures, alternative contact lenses cough medicines healthy eating guidelines HRT insurance slimming products Heaters electric convection gas Hedge trimmers Home loan packages Home safes Home theatre systems Hormone replacement therapy (HRT)	May Oct Nov Dec, Apr* Jun Aug May Jul Dec Nov Jun Jul Mar Jul Jul, Sep Jul Apr May Oct Mar Sep Sep Jan/Feb	D epreciation on cars Detergents, laundry Diet controversies Digital cameras Dishwashers Dishwashing liquids Disposable razors DVD players	Dec, Apr*		

BECOME A FRIEND OF THE CONSUMERS' ASSOCIATION



The Australian Consumers' Association is completely funded by our subscribers, book purchasers and other consumers. We don't receive ongoing funding from government or any commercial source. Your donation or bequest to ACA will assist our work of informing and representing Australian consumers. To make a donation or for further information, call Mark (pictured) on (02) 9577 3399 or write to: Friends of ACA, 57 Carrington Road, Marrickville 2204.



It's a novel idea ...

But even for your dog — garlic for fresh breath?

Gourmet
**CHICKEN
NUGGETS**
with GARLIC for fresh breath

Great Deals For Kids At Club Med Lindeman Island

Looking for a family escape this year that won't break the budget? Club Med has just released a fabulous offer for kids at its Lindeman Island resort in the wonderfully-warm Whitsundays.

Kids get to stay for **only \$45 a night** - and that includes just about

everything — accommodation, 3 meals a day with unlimited wine and beer with lunch and dinner, unique children's clubs, sports and activities with tuition, evening entertainment — the lot.

But be quick. This very special deal is for a **strictly limited time** only

20th July to 31st Oct school holidays.

The **newly renov** superbly set up for three purpose-built (2 and 3 year old's, club for kids 8 to 11 own pool and shad



MIXED DOZEN: \$119.88*
(or \$39.96 per month over 3 months)
1 bottle each of the 10 wines pictured
plus 6 bottles of Bubbly, FREE!

ALL WHIT
for \$35.96 pr
2 bottles each
plus 6 bottles

SOME DOZEN!

This 'mixed dozen' was a special offer for St George Bank credit card holders — one reader thought it might be an example of a banker's dozen.

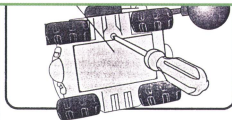
KIDS GROW UP FAST THESE DAYS ...

And when taking up this particular Harvey World Travel promotion, your kids'll enjoy quite an adult lifestyle.



WHAT YOU SEE ...

... Isn't necessarily what you get — as all savvy consumers know.



For best performance, we recommend replacing the batteries that came with this toy with two, new alkaline "AA" (LR6) batteries.

A LOOMING POWER CRISIS?

This toy manufacturer clearly doesn't have much confidence in the batteries it supplies.

DICKENS
REAL ESTATE PTY LTD

50th ANNIVERSARY YEAR
EST 1958

With that much experience how could you go wrong.

For all your real estate enquiries including Motels and Caravan Parks give us a call.

By Dickens, they're early!

Maybe they should keep these promos in storage for another five years?

HOW ABOUT A LITTLE HELP?

The Hard Word would like to thank all the readers who've responded with examples of outrageous ads, promotions and products. Thanks to A Perlezz, J Kal, I Hough, M Maxwell, S Dalton, R Jorm, J McWatters and P Klein for their contributions to this month's Hard Word. Please keep them coming.

If you have any examples you think deserve to be on this page, send them to *The Hard Word*, CHOICE, 57 Carrington Road, Marrickville 2204, or email your suggestions to thehardword@choice.com.au.